DOCUMENT RESUME

ED 391 241 EA 027 306

AUTHOR	Carrington, Edwin W.
TITLE	The Future of Education in the Caribbean: Report of the CARICOM Advisory Task Force on Education.
INSTITUTION	Caribbean Community Secretariat (St. Lucia).
PUB DATE	93
NOTE	77p.; For related documents, see EA 027 304-307.
PUB TYPE	Reports - Evaluative/Feasibility (142)
EDRS PRICE	MF01/PC04 Plus Postage.
DESCRIPTORS	Adult Education; Curriculum Development; *Educational Improvement; *Educational Objectives; *Educational Planning; Educational Policy; Elementary Secondary Education; Foreign Countries; Higher Education; Master Plans; Policy Formation; *Regional Cooperation; *Regional Planning; Standards
IDENTIFIERS	*Caribbean

ABSTRACT

The Caribbean Community (CARICOM) Regional Policy on Education was approved by the Standing Committee of Ministers with responsibility for Education (SCME) in a special meeting held on September 9, 1993. The policy constitutes a major regional effort to build a strong and dynamic community. An overall theme of the policy is regionalism as an ideal, as a resource, and as a style of operation. This document summarizes policy issues and concerns and identifies policy goals and actions required for various levels of the education system. Section 1 provides an introduction and overview of the work of the Advisory Task Force on Education. Sections 2 through 6 are organized similarly. Each includes sections that describe issues and concerns, future directions, policy goals, and action plans. Section 2 presents objectives for different educational levels, including early childhood, primary, secondary, tertiary, and higher education. The third section highlights the curriculum-reform agenda for the following areas: culture, sports, and the arts; special-needs education; language learning; mathematics and science education; educational technology; work-force preparation; and adult education. Plans for improving teacher education, school administration and management, and educational finance are outlined in sections 4 through 6. The recommendations of the task force would require action at regional, sub-regional, and national levels. Appendices contain lists of task-force members, background papers and reports, and consultations and meetings. (LMI)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

EA.

CARIBBEAN COMMUNITY

ED 391 241

THE FUTURE OF EDUCATION IN THE CARIBBEAN

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

✓ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

G. Brown

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

CARICOM REGIONAL EDUCATION POLICY 1993

EA 027 306

BEST COPY AVAILABLE

THE FUTURE OF EDUCATION IN THE CARIBBEAN

REPORT OF THE CARICOM ADVISORY TASK FORCE ON EDUCATION

Caribbean Community Secretariat
Layout: The Commonwealth of Learning
Published with assistance from UNESCO
Endorsed by the Standing Committee of Ministers Responsible for Education at a Special Meeting held in Antigua and Barbuda in September 1993.

TABLE OF CONTENTS

FOREWORD			
STATEMENT FROM THE TASK FORCE			2
SECTION 1:		**Introduction and Overview of the work of the Advisory Task Force on Education**	3
SECTION 2:		**Levels of Education**	8
	2.1:	Early Childhood Education	8
	2.2:	Primary Education	11
	2.3	Secondary Education	15
	2.4	Tertiary and Higher Education	20
SECTION 3:		**Curriculum Reform**	25
	3.1:	Culture, Sports and the Arts	27
	3.2:	Education for Special Needs	30
	3.3	Language Learning	34
	3.4	Mathematics and Science Education	39
	3.5	Technology and the Curriculum	44
	3.6	School and the World of Work	48
	3.7	Adult Education	52
SECTION 4:		**Teacher Education**	56
SECTION 5:		**Management and Administration of Schools**	61
SECTION 6:		**Financing of Education**	65
SECTION 7:		**Endorsement of Report**	69
Appendix I:		**Members of the Advisory Task Force on Education**	
Appendix II:		**List of Background Papers and Reports**	
Appendix III:		**Consultations and Meetings**	

FOREWORD

This CARICOM Regional Policy on Education approved by the Standing Committee of Ministers with responsibility for Education (SCME) at a Special Meeting in Antigua and Barbuda on 9 September, 1993 constitutes a major landmark among our regional efforts to build a strong and dynamic Community.

It encapsulates the issues and concerns which must be addressed if we are to confront successfully the challenges which are continuously emerging at the regional and international levels. The architects of this policy, the Advisory Task Force on the Future of Education, have set out for us the future direction which we must take and have articulated the policy goals which should guide us on our journey. The Policy challenges policy makers to be innovative and creative in the light of the dynamic changes taking place at the global level which are having an impact on the strategies which we wish to pursue in the Region.

An overarching theme in this Policy is that of REGIONALISM: Regionalism as an ideal, as a resource and, equally important, as a style of operating. This concept must become the foundation on which we seek to build not only our educational systems, but all other sectoral systems which are dedicated to ensuring our survival and to facilitating our people in their quest for a better quality of life. In the unfolding world of the Twenty-First Century there is no better choice for us. It is a virtual imperative in the Caribbean.

The SCME, in embracing this Policy, has given tangible expression to the value placed on human development by the Conference Heads of Government who, in 1989 in the Grand Anse Declaration, affirmed that "...We are conscious that people rather than institutions are the creators and producers of development".

I wish to express sincere appreciation to the Members of the Advisory Task Force on the Future of Education for their sterling contribution to our human development. I also wish to thank the education policy makers and officials, parents, representatives of interest groups, and the children in particular who contributed to the consultations undertaken in the Region by the Task Force. The Secretariat looks forward to continued collaboration with the Task Force in its efforts to advance regional integration through programmes for training and education. Finally, I wish to thank the SCME for being the catalyst in this area of our development.

Edwin W. Carrington
Secretary-General

STATEMENT FROM THE TASK FORCE

The Advisory Task Force on Education is pleased to submit this report to the Standing Committee of Ministers responsible for Education. The Report is the outcome of five national consultations and seven sub-committee meetings in several Member States of the Caribbean Community, long deliberations by members of the Task Force as well as careful study of written submissions and specially prepared background papers.

The Task Force conducted its business under circumstances as trying as those which our regional educators have to tolerate. Without a budget permitting a realistic meeting schedule, we were obliged to creep through our work using the opportunities of other regional business that brought clusters of our members within contact distance. Only four plenary convocations of the Task Force were possible. The remainder of our work was effected by sub-committees convened as opportunities were identified by the Secretariat. The process would not have produced a document without the superhuman efforts of the members of the Secretariat staff who exceeded normal imagination in finding ways to bring members together on Task Force business and who uncomplainingly accommodated to the idiosyncratic requirements of the members and their jobs. Their efforts allowed us to carry lightly our personal sacrifices in the interest of this assignment.

The document we now submit will seem familiar to the Standing Committee of Ministers responsible for Education who receive it. There are several reasons for this. First of all, the report has attempted to recognise the input of the many categories of citizens of the Region with whom we spoke - children, parliamentarians, teachers, educational officers, businessmen, researchers, and other parents beyond those categories. In other words, the report echoes the voices which the Ministers have heard in other fora. Secondly, the report has come at a time when individual states and sub-regional groupings of states have engaged in similar examinations of their own educational systems and attempted to chart their futures within their own perceptions of their resources. Their proposals share much harmony with ours.

Ministers are invited to recognise that the recurrence of identical or similar elements in the voices we echo and in the several documents on education which they will have read is adequate evidence that the lines of action in education are absolutely clear. Only the will to follow the paths is necessary. Our report is neither deliberately novel nor deliberately conservative. It is simply an honest attempt to present the best judgement of the Task Force obtainable within the circumstances of its operation on the basis of the data that it could gather.

We thank the Standing Committee of Ministers responsible for Education for this opportunity to serve the Caribbean within our areas of competence.

SECTION 1

INTRODUCTION AND OVERVIEW OF THE WORK OF THE ADVISORY TASK FORCE ON EDUCATION

1.1 INTRODUCTION

Education is and will continue to be a critical factor in national and regional efforts to sustain and enhance productivity and economic growth. This incontrovertible fact of life now, and for the foreseeable future, should not prevent us from focusing on the broader role which education must play as we seek to establish social solidarity in our Region. This can only be built upon a strong sense of common cultural identity and on the increased social understanding and sense of community which can flow from such cultural identification.

This recognition of a common cultural identity captured in the concept of regionalism was evident at the Inaugural Meeting of the Standing Committee of Ministers responsible for Education (SCME) in 1975. At that meeting, the SCME called for a regional approach to the re-examination and re-assessment of educational goals and objectives and recommended that collaborative action at regional and sub-regional levels was necessary if meaningful educational development was to be sustained within the Caribbean Community.

Thirteen years later, in 1988, the SCME repeated its call for a coordinated regional approach to the problems of educational development as a necessary step in achieving the goal of regional integration. The SCME agreed that such a regional approach would require an intensive process of regional consultation and in-depth analyses, the outcomes of which would inform the interventions required to meet current and anticipated needs.

In response to the mandate from the SCME, the First Regional Consultation on Education was convened in Kingston, Jamaica in 1989. Representatives from the education system, the public service, the private sector, institutions, and agencies were brought together to discuss a wide range of issues. These included lack of coherence in education and training arrangements between the formal and non-formal systems; the need for better administration and management; teacher education as well as problems of literacy, numeracy and foreign language skills acquisition.

In addressing these issues, the Consultation identified aspects of educational development and reorientation which should be given priority attention. The main areas identified were as follows:

- the need to develop a clear perspective on the importance and **significance of regionalism** as an ideal, a resource, and a style of operation;

- the need for a focus on educational **objectives and curricula** to provide the experiences necessary for young people to develop those enduring skills needed for inter-personal relationships, information processing, problem solving and decision-making;

- the need to develop modes of management based on **partnership and participation** linking school, home and community in order to achieve efficiency and equity in the education system.

In order to extend and deepen the thinking initiated at the First Regional Consultation, the Secretary-General of the Caribbean Community (CARICOM) appointed an Advisory Task Force on Education (ATFE). The ATFE members were appointed in their individual capacities and were drawn mainly from regional institutions and organisations (Appendix I).

This policy document is informed by the deliberations of the ATFE, its consultations and background papers prepared by members of the Task Force in collaboration with the staff of the Education Section of the Secretariat (Appendix II). The policy document summarises the issues and concerns and states **policy goals** and **actions** required for the various levels of the education system and for some specific areas of concern that pervade these levels.

The ATFE was appointed with the following Terms of Reference:

- To continue and extend the thinking and analyses begun in the First Regional Consultation on the Future of Education in the Caribbean.

- To outline and manage the activities and events required in a continuing process of regional consultation and analyses, taking care to involve relevant constituencies and to draw upon widespread views about educational objectives, content and arrangements appropriate to contemporary needs and anticipated challenges.

- To distil from the work and consultations undertaken, outcomes and recommendations for consideration by policy-makers.

1.2 GUIDING THEMES

The Task Force employed in its activities the following four guiding themes that were considered crucial in order to arrive at coherent, "policy friendly" recommendations for the future.

1.2.1 Regionalism

Regionalism can be regarded as:

(a) **a resource** deriving from our common historical and cultural heritage and experiences, and potentially available for deployment in our educational systems for bringing to fruition the highest national aspirations;

(b) **an ideal** not yet achieved, but to be pursued with vigour within our educational processes by giving it full recognition in our curricular offerings.

(c) **a style** of operation which must mark national efforts at educational development, and which must induct individuals into national communities as channels or gateways to the wider regional community.

> Regionalism is a way of **doing, thinking, feeling,** which seeks to **identify, give meaning to, acknowledge** the integrity of common and unique Caribbean Communities, and also to pool these various experiences obtained from institutions and from persons in order to compel an action.
>
> **Background Paper No. 1**

1.2.2 Environment of Educational Systems

This second guiding theme relates to the need to provide a holistic treatment of educational issues. The concern here is that specific attention should be given to the environment of education systems not only as a constraint but also as a resource.

1.2.3 Relevance and Continuity

The focus on the environment, especially in the context of late Twentieth Century scientific and technological change and development, raises questions of relevance normally taken to mean relevance of the extant curriculum in a rapidly changing world. This is an important issue but it can lead to a crowding out of the question of continuity which should be sustained, but which can only be ensured through appropriate re-tooling and upgrading of the teaching force.

1.2.4 Coherence in the Education System

In keeping with the commitment to holism, this guiding principle points to the need for articulation of levels beginning at the pre-primary level. Coherence forces one to consider the processes by which education systems come into being as crucial explanatory variables of their operations and expansion. Further, in order to achieve coherence there is need to re-conceptualise, re-orient and restructure the links between the "formal" and "non-formal" spheres of the education

system. Partnership and participation must be essential components of the processes for achieving coherence.

1.3 METHODOLOGY EMPLOYED BY THE ATFE

In carrying out its work, the ATFE employed a process of regional consultations and analyses. The original intention was to undertake evaluation studies, some action research, and to sponsor potentially informative experiments. However, the absence of a formal budgetary allocation prevented the Task Force from pursuing this preferred strategy. It also made its consultative work spasmodic. Nevertheless, in anticipation of funding, the ATFE has developed a number of regional research projects and has submitted them to funding agencies.

In the consultative process, the ATFE succeeded in garnering the views of wide-ranging sectoral interests. This is in keeping with the Grand Anse Declaration of 1989 which expressed the resolve to initiate a consultative process with the people of the Region, in an effort to formulate and implement strategies that would ensure that the Region adequately addresses the challenges of the Twenty-First Century.

Sub-committees of the ATFE held consultations (detailed in background documents) with professionals, members of the business community, school children, media personnel, academics, officials in Ministries of Education and representatives of organisations, institutions and interest groups. Thus, through this open popular consultation, the Task Force has been able to evaluate a rich range of ideas for furthering the initiatives towards integrated action (Appendix III).

1.4 LINKAGE WITH REGIONAL AND INTERNATIONAL BODIES

1.4.1 OECS Secretariat

The ATFE and the OECS Working Group were mandated to deal with similar issues and concerns. The strategies adopted differed somewhat but linkages were established between the two groups to identify areas for collaboration to avoid duplication of effort and to ensure cohesiveness between national, sub-regional and regional programmes.

1.4.2 UNESCO

UNESCO has a responsibility for the implementation of regional activities within the context of the World Declaration on Education for All. In carrying out these activities, UNESCO and the ATFE participated in several joint efforts. With assistance from UNESCO, the Secretariat convened the First Regional Consultation on Education in 1989. UNESCO also assisted the ATFE in holding consultations on basic education in The Bahamas and Belize. Collaboration with UNESCO has been beneficial in effectively utilising limited resources and in developing joint regional strategies to deal with common problems and concerns in education in Member States.

1.4.3 West Indian Commission

The ATFE presented a document entitled "Progress Report on the Work of the Caribbean Advisory Task Force on Education" to the West Indian Commission (WIC) in March 1992. The WIC report, Time for Action, drew on the ideas of the Task Force, particularly in its recommendation of the areas for immediate regional action in reforming and restructuring the primary and secondary school systems.

1.4.4 Other Agencies

The ATFE met with a World Bank Team in July 1990 at the beginning of the World Bank's study on education in the Region. When the study was completed the ATFE acted as an advisory body to the SCME in the preparation of a CARICOM Position Paper on the report of the World Bank Study entitled "Access, Quality and Efficiency in Caribbean Education."

The ATFE also held discussions with, and benefited from the expertise of staff at the Commonwealth of Learning and the Commonwealth Secretariat.

SECTION 2

LEVELS OF EDUCATION

SECTION 2.1

EARLY CHILDHOOD EDUCATION

2.1.1 ISSUES AND CONCERNS

At the pre-primary (nursery) or early childhood education (ECE) level, the main issues and concerns relate to the learning environment, access, the level of training of teachers, the curricula and the nature of transition from nursery to the primary level.

ECE has increasingly become recognised as the foundation stone of education. However, there is a danger that gains made in pre-primary intervention may be lost if primary schools are not improved.

Traditionally, ECE has been provided by private interests or community groups. While this has allowed governments to limit their spending on ECE, it has permitted the development of a number of problems that include: many young children being schooled in sub-standard conditions; access, in many cases, being limited to the children whose parents can afford the required fees; the presence of a number of untrained teachers in nursery schools; and difficulties in implementing centrally developed curricula.

The attitudes of parents have also posed problems for schools that attempt to implement an experience-based curriculum in which play as an educational process is a central feature. Some parents insist that they do not send their children to school to play, but to learn, and they want to see evidence of learning in their children through their ability to recite the alphabet, add and count. Thus, parental attitudes often contribute to forcing teachers into a subject-centredness which dampens children's curiosity and creativity even before they start primary school.

Whether the early childhood phase is experience based or subject centred, discontinuity between the curricula of the nursery school and the primary level is another cause for concern demanding attention so as to facilitate a smooth transition from one level to the next.

2.1.2 FUTURE DIRECTIONS

At the early levels, children are curious to learn about themselves, their families and home environment and the world about them. If this curiosity is satisfied, learning to them becomes fun. It is important to have at this level teachers who can sustain children's enthusiasm, kindle their joy for learning and their excitement for discovery and who can keep the curiosity of their young minds alive. These teachers need to be trained to degree level in programmes that not only give them the necessary pedagogical skills for effective

teaching and learning at this level, but which also instil in them a dedication to duty, a love for children and create in them the same enthusiasm and enjoyment for learning which they try to sustain in the children they teach. These teachers should also cherish the values and attitudes which are considered desirable for developing young minds.

To do the job well, teachers need the guidance of a curriculum which is integrated and centred around the experiences of the children, relevant to their culture, their needs and interests - a curriculum that has the power to sustain their curiosity and guide them to new discoveries each day.

Ministries of Education, cooperating at a regional level, have to play a central role in developing such a curriculum for early childhood education, drawing on the expert resources at their disposal, and seeking the enactment of legislation, where necessary, to ensure that such a curriculum is implemented by the schools.

Play as an educational process should have a dynamic place in the curriculum. Play comprises physical activities such as running, jumping, climbing and manipulative activities, such as frolicking in sand, or juggling building blocks. These activities are important for the physical development and muscular coordination of the child as well as for the building of concepts. Play makes learning fun, opens up avenues for exploration and invention, and provides opportunities for children to interact and socialise.

Background Paper No. 2

Finally, responsibility for ECE extends beyond the boundaries of Ministries of Education. Because the health of the child is critical to his or her ability to learn properly at this level, there is need for linkages between the education sector and the Ministries of Health, as well as agencies and organisations that can provide social services necessary to support education at the pre-primary level.

2.1.3 **POLICY GOALS**

- **To make Early Childhood Education available to all children between the ages of 3-5 by the year 2000.**
- **To improve the quality of Early Childhood Education.**

2.1.4 **ACTIONS REQUIRED**

- **Establish** partnerships between governments, non-governmental organisations, the private sector, the church and the community at large in expanding in a holistic manner the provisions for Early Childhood Education.
- **Introduce** appropriate legislation and administrative guidelines for the effective operation of pre-schools.

- **Establish** mechanisms for monitoring pre-schools to ensure that they meet satisfactory standards and abide by given guidelines.

- **Develop** a core curriculum for Early Childhood Education.

- **Coordinate** at a regional level the activities of the various agencies involved in Early Childhood Education.

- **Develop** regional programmes for the training of teachers in ECE to degree level by the use of innovative methodologies and delivery systems such as distance education and vacation programming.

- **Mount** awareness programmes designed to give parents, guardians and other care-givers an understanding of ECE and the importance of proper health and nutrition for effective learning at this level.

- **Improve** the status of pre-school teachers by offering them better terms and conditions of service.

- **Develop** and disseminate the results of regional research projects designed to evaluate the effectiveness of different models of ECE employed in the Region.

SECTION 2.2

PRIMARY EDUCATION

2.2.1 ISSUES AND CONCERNS

Among the main issues and concerns which have been identified in primary education in the Caribbean are appropriate approaches to curriculum and teaching, teacher training, examinations, the lack of norms for achievement and inadequacy of resources.

Primary school teachers, preoccupied with traditional approaches to the teaching of subjects in a curriculum that is already overcrowded, tend not to make sufficient use of play as an educational process. In general, while they may recognise the need for activity-oriented experiences, they tend to limit 'activity' to the physical or the practical. They appear not to recognise that exercises which engage thinking on the part of students are also 'activities'. The use of 'chalk and talk' in teacher dominated classrooms, a situation which is perpetuated by traditional approaches to the training of primary school teachers, diminishes opportunities for pupil-initiated questions and the development of thinking skills.

Assessment practices at the primary level are another cause for concern. The Common Entrance Examination (CEE) is regarded by many as the bugbear that prevents real learning from taking place. This has led some Member States to abolish the CEE while others are planning to do so. Preoccupation with the CEE as a selection examination for the secondary level has caused us to lose sight of the need for other forms of assessment and for determining levels of achievement appropriate for different grade levels.

One outcome of the absence of these achievement norms is that textbooks and learning aids continue to be developed without knowledge of the optimum level of difficulty to be set for the relevant grade level or age groups. The lack of achievement norms has also resulted in the problem of discontinuity in curricula from one grade level to the next.

Other problems that need to be addressed in the primary system are early drop-outs, irregular attendance, absenteeism, shortage of supplies, inadequate furniture, lack of textbooks and other teaching aids, poorly ventilated, badly lit and overcrowded classrooms. The quality of curricular offering, low levels of achievement in literacy and numeracy, with performance amongst boys being particularly poor, are also areas of serious concern.

> Given that the aim of education should be to develop a well-rounded citizen, the curriculum should be dictated by societal and individual needs. These should be determined through research and a consultative process.
>
> **Consultation on Primary Education, Belize 1991**

2.2.2 FUTURE DIRECTIONS

To cope with the modern world, young people need to be technologically literate. They need at an early age, indeed at the primary level, to be taught to define problems and devise solutions to technical problems, drawing as far as possible on their own environment. The experience gained at this early age will help to build confidence in their own capability to find solutions to technical problems and to minimise perceptions that solutions to technical problems must be imported. It is through this approach to shaping the minds of our youth that the Region will be laying the foundation for developing its endogenous technological capability.

The rapid advance in technology has led to the availability of an overwhelming amount of information in our societies. This development means that our young must also acquire techniques of knowing how to seek information systematically to solve problems and learn how to evaluate it critically.

Teachers at the primary level need to appreciate that technology does not simply refer to products, but also process. Technology refers to physical and intellectual tools that extend our capacity to relate to our environment. Hence there is need for the development of a way of thinking that takes this broader view of technology into account and that should permeate the teaching of all subjects in the curriculum at all grade levels.

Primary school teachers in their planning need to organise learning activities that will enable children to develop higher level cognitive skills such as analysis, synthesis and evaluation, however elementary the level. Time should be spent applying these skills to the everyday experiences of the children.

To nurture thinking, teachers must create learning environments in which students feel free to ask questions, to take risks in learning, to experiment with ideas, to make mistakes without being chastised and to learn from their mistakes. Every primary school teacher must be skilled in a variety of questioning techniques.

Furthermore, if children are to explore and experiment with ideas, they need to have access to learning resources such as high quality textbooks, good library facilities, computer-assisted instruction, educational television and radio. Self-instructional and activity-oriented materials also need to be used on a wider scale to teach children how to learn on their own and to make it possible for them to learn at their own pace, wherever they can and whenever it is possible.

Primary school teachers, particularly at the lower grades, need to have a sound grasp of how to integrate learning experiences. They also need to make more use of **play** as a medium through which children can experiment with thought and language and indulge their imagination.

We need primary schools with curricula which are child-centred, integrated in approach, oriented towards activities which encourage children to ask questions, to think and engage in problem-solving.

Background Paper No. 2

The implications of all this for teacher training are clear. If we want to develop children who are independent, creative thinkers, we need primary school teachers who themselves exhibit these skills and dispositions. The content and learning activities to which they expose the children must be intellectually engaging. Consequently, it is no longer sufficient for primary school teachers to be just one step above their students. They must have in-depth knowledge of the subjects they teach. They must be good teachers of Mathematics, good teachers of Language, Social Studies, Science and the Arts. They should understand the structure of the subjects they teach and how each one differs from the other. Teachers need to transfer this awareness to their students so that they in turn can come to understand the distinctions and connections among subjects and their relatedness to life.

The primary curriculum should include Life Skills; Religion; Technical and Vocational Education including Home Economics and Agriculture; Aesthetics; Physical Education; Drug Abuse and Sex Education; Environmental Education and World Geography.

Consultation on Primary Education, Belize 1991

Learning involves not just what the teacher imparts. It also involves the perceptions, the interests and feelings of the learners as well as their social and emotional well-being and their attitudes. In addition, it involves interactions among teachers, students, their parents and others. All these persons must work in partnership to create an environment in which children can develop positive self-concepts, acquire the ability to respond to changes around them in meaningful ways and learn to respect and care for each other. Primary schools must become caring communities in which learning is fun and each day brings the excitement of new discoveries about the world.

2.2.3 POLICY GOALS

- **To develop children with lively, enquiring minds who are capable of independent thought and self-directed learning.**
- **To provide an improved quality of primary education so as to enable students to obtain a sound foundation for secondary education.**
- **To facilitate the transition from primary to secondary schools.**

2.2.4 ACTIONS REQUIRED

- **Develop** a more balanced curriculum in which due thought is given to culture and the arts and the development of higher level thinking skills.

- **Document** and evaluate different approaches that have been used in the Region to improve literacy and numeracy at the primary level and disseminate the results to relevant audiences for appropriate use.

- **Document** and disseminate experiences in the region in the development and implementation of an integrated approach to curriculum at the primary level for appropriate use.

- **Develop** achievement norms according to grade level and subjects.

- **Rationalise** the mechanisms for the transfer of students from primary to secondary schools.

- **Review** current assessment practices, giving special consideration to continuous assessment supported by a system of improved record-keeping in schools.

- **Encourage** partnerships between the school, the home and the community in creating effective learning environments in schools.

- **Upgrade** academic performance and include information processing skills in programmes for the training of primary school teachers.

- **Institute** effective in-service professional development programmes for primary school teachers.

- **Upgrade** the competence of the trainers of primary school teachers using appropriate technology and adult education methods.

- **Modernise** school plants in order to make available modern technologies, improved library facilities, classrooms with adequate storage space, sports facilities, improved sanitation and other facilities for students and staff.

- **Improve** the training of primary school principals so that they acquire increased competence in instructional supervision and curriculum management.

- **Encourage** secondary schools and their feeder primary schools to set up curriculum committees whose tasks include:

  - continual review of the primary and lower secondary curricula;

  - the formulation of strategies for easing the transition from primary to secondary schools.

SECTION 2.3

SECONDARY EDUCATION

2.3.1 ISSUES AND CONCERNS

Many of the issues common to the secondary school are those also identified in the primary school. They include the lack of continuity in curricula from one grade level to the next, inadequacy of supply of textbooks and other teaching-learning materials, unsatisfactory school library facilities and insufficient use of computers to assist learning. Other important concerns that need to be addressed at the secondary level include issues of access and equity, pressure on the curriculum to respond to the demands for new knowledge, generally poor performance at the Caribbean Examinations Council examinations, curriculum overload, shortages of trained teachers in critical areas and harmony of articulation with tertiary institutions.

> Many of the educational problems in the Region are not necessarily unique but generic. Illiteracy and teachers' working conditions are two such examples. The Region is not alone in facing these problems. Specifying the problems in a wider setting will enable Caribbean educators to exploit the experiences of others regionally and internationally.
>
> **First Regional Consultation on Education, 1989**

Problems related to the Common Entrance Examination (CEE) have already been mentioned. In some Member States only about one-third of the students who take the CEE gain entry into the selective secondary schools. The remainder enter non-selective schools with a sense of failure which is exacerbated by the attitudes of their teachers, parents and the society at large which accord low status to these schools. The most disadvantaged are the children who continue in All Age schools who leave these institutions ill-prepared for the world of work or for further training. Wastage at the secondary level is particularly high in some countries which record a fifty percent dropout rate among students.

The pressure on the curriculum to respond to the demands for new knowledge is greater at the secondary than at the primary level. The secondary curriculum needs to accommodate technology studies, environmental education, career guidance programmes and courses in entrepreneurship. In addition, consideration of a place for media studies is important if the culture of the Region is to sustain itself and resist uncritical absorption of electronically transmitted material from other cultures.

In the wake of response to these demands, there is a serious concern over curriculum overload and the fear that in the effort to accommodate these new areas other subject areas such as the Arts, foreign languages, sports and even the teaching of English either will not be given enough emphasis or will be squeezed out of the curriculum all together.

Another problem that has to be addressed is the lack of certification of children who leave non-selective schools. Even in Member States which have developed local school leaving examinations for such students, there is still a problem of acceptance of that certification by employers and the society in general.

There is also a general reluctance on the part of employers and tertiary level institutions to recognise the CXC Basic Proficiency Level. The usefulness and acceptance of these examinations are concerns that CXC needs to address with urgency. Performance at the General Proficiency (GP) Level is also below expected standards. The shortage of trained teachers in most Member States is a factor that contributes to such generally poor performance.

Viewed on a regional basis, the number of entries for CXC General Proficiency is relatively small in subjects like Mathematics, Chemistry and Physics. The number of candidates in these areas who proceed to the "Advanced" ("A") level and subsequently enter the regional universities is well below the number required to meet the needs in the Region for skills in such areas as engineering, technology, medical sciences and computer science.

2.3.2 FUTURE DIRECTIONS

The process of laying the groundwork at the primary level towards making young people technologically literate has to be consolidated at the secondary level. Emphasis must continue to be placed on problem definition, problem solving, building sound information, seeking techniques and above all building confidence in the students' ability to find solutions to technical and non-technical problems.

Human development must be a major concern particularly at the secondary level where there is need to stem the wastage of talent among school drop-outs. Many of these students feel alienated because of the failure of the school system to provide them with the survival skills that they need. Dualism in the secondary school system with its resultant inequalities of educational provision must be eradicated in the years ahead. We have to make the poor and the disadvantaged into genuine stakeholders in the destiny of their countries.

Secondary education should give young people survival skills that enable them to lead healthy productive lives as responsible adults. Survival means many things for our young people. One meaning is being able to acquire and maintain a healthy concept of self and a sense of cultural rootedness which engenders a commitment to the region. At a time when the young are constantly being bombarded by powerful media messages that seek to re-orient their values and aspirations, we need more than

ever to ensure that they acquire the skills that will enable them to evaluate critically the messages from the foreign media.

Survival for our young people also means not simply adapting to change, but being able to see themselves in the vanguard of change. They must be flexible, with the ability to change career or job or move in and out of self-employment with ease as changing circumstances demand. To produce young people with such an orientation, we need to adopt new approaches to vocational preparation. Such approaches should not only enable students to develop skills in more than one area, but should also imbue them with the courage to take risks and to become entrepreneurs.

From the students' perspective, there is another side to 'survival' of which their parents, teachers and other educators often appear oblivious in their preoccupation with issues of structural adjustment and financing of education. The students of today, and increasingly so those of tomorrow, have to find ways of coping with the volume of knowledge that they are expected to acquire. We demand that they learn so much so quickly and fail to consider the effect on the minds of these young people and on their general psycho-social well-being.

For us to equip our young people for survival we need to take several steps. For example, we need to broaden our vision of literacy. We need to ensure that our secondary school system produces graduates who are **scientifically, technologically and artistically literate.** These **literacies**, however, must be acquired in a way that facilitates the integration of knowledge. Changes are taking place in the world so rapidly that the problems that our young people will need to solve cannot be compartmentalised in any one discipline. We need, therefore, to move towards an approach to the secondary curriculum which is more integrated and multi-disciplinary in nature and which utilises available technologies.

> The school system has to respond to rapid changes by providing opportunity for students to develop skills that are enduring and content-neutral. The problems that students will need to solve require a multi-disciplinary approach since these problems cannot be compartmentalised neatly into any given discipline. Moreover, the many social problems change over time and students need to develop those enduring skills that will help them cope with changes and function in various situations. Some enduring skills are: communication skills; skills for the retrieval and evaluation of information; skills in numeracy; skills of inquiry; and life skills.
>
> **First Regional Consultation on Education, 1989**

Other enduring skills which our secondary schools should enable students to acquire include skills in communication, in making intelligent use of the knowledge acquired in research, and in evaluation. These skills can be established using strategies designed to develop high level cognitive skills. Thus, as at the primary level, getting students to think and reason should be a priority in the teaching of all subjects in the secondary curriculum.

As we consider the situation of secondary school students we need to be aware that to a large extent we have taken the fun out of learning in secondary schools. This is a situation that we must correct. We must put the students back into the centre of education. We must put enjoyment back into learning.

2.3.4 **POLICY GOALS**

- **To improve the learning environment and the quality of educational offering at the secondary level;**
- **To enable access to secondary education by all primary school leavers by the year 2003;**
- **To broaden certification at the secondary level and to introduce post-Caribbean Secondary Education Certificate (CSEC) examinations;**
- **To provide adequate numbers of candidates for further training in critical areas of need for national and regional development;**
- **To facilitate the transition from secondary schools to tertiary institutions and to the world of work.**

2.3.5 **ACTIONS REQUIRED**

- **Utilise** alternative modes of delivering secondary education, including distance education and open learning systems;
- **Design** a core curriculum for secondary education that would produce a graduate who is scientifically, technologically and artistically literate.
- **Broaden** CXC's examination base to provide certification to those candidates who complete secondary education but are unable to take the present CXC examinations;
- **Request** CXC to -
  (i) evaluate the Basic Level of proficiency;
  (ii) provide a post-CSEC examination to replace the GCE 'A' level.
- **Implement** a regional strategy designed to provide the tertiary level with adequate numbers of candidates with the Mathematics and Science base required for training in critical areas of need for national and regional development.

- **Set up** secondary school curriculum committees which include representatives from tertiary institutions, business and industry in order to formulate strategies for easing the transition from school to work or further study and to continually review the curricula of secondary schools and tertiary institutions.

SECTION 2.4

TERTIARY AND HIGHER EDUCATION

2.4.1 ISSUES AND CONCERNS

Tertiary institutions in the Region suffer from a number of problems. These include inadequate financing, lack of flexibility and an inability to attract suitably qualified staff and students especially in those disciplines with a mathematics and science base and in the foreign languages areas.

By far the most serious problem faced by these institutions is the lack of adequate financing. The University of the West Indies attributes its financial problems largely to the fact that the contributing territories are in arrears. In addition, the renewed interest of the international community in basic education for all, symbolised by the World Conference on Education for All in Jomtien, Thailand and a reordering of education priorities by Governments have resulted in a shift in the allocation of financial resources from higher to lower levels of the education system. This has happened at a time when there is increased pressure on the higher levels for greater access and coverage.

The lack of flexibility has also created several problems. Among the non-campus territories there is a feeling that their interests are not being well served by the UWI. They have expressed concern about the UWI's inflexibility in its programme offering, its rigid entry requirements and its slowness to respond to change. These restrictions could account in part for the fact that some potential scholars opt for studies abroad.

Also, a number of tertiary institutions have forged links with European and North American universities which give credits for their courses more readily than the regional universities. A continuation of this trend can lessen considerably the influence of the regional universities on the character and development of education in the Region. The advent of the Association of Caribbean Tertiary Institutions (ACTI) has provided a forum in which some of these issues can be addressed.

2.4.2 FUTURE DIRECTIONS

Academic excellence can now be found in a wide range of tertiary institutions. This means that the regional universities are no longer the custodians of excellence. Some Community Colleges now offer Associate Degrees in collaboration with North American universities. The College of Arts, Science, and Technology (CAST), now a member of the Association of Commonwealth Universities, offers degree programmes that are integrally linked with work force requirements.

These developments reflect an increasing demand in the Region for refresher and skill upgrading courses at the professional and para-professional levels, for short training courses in public sector management (health, education, customs and excise) and for specialisations in the technical and business areas. The regional universities must rise to the challenge of these demands.

> Our universities must be Caribbean but think International. Offering programmes developed in the Caribbean to Europe, Africa, Asia, North and South America and Australia, must become common place in the twenty-first century. This is imperative, not only if our universities are to serve as centres of excellence comparable to any university in any part of the globe, but if Caribbean culture is to hold its own in a world that will become increasingly competitive in the area of international transfer of knowledge.
>
> **Background Paper No. 3**

To do so, members of the University community must be prepared to change not only their attitudes towards university teaching, but also to the administrative systems and procedures to which they have become accustomed and their methods of teaching, including the distance education methodology employed in the University of the West Indies Distance Teaching Experiment (UWIDITE).

There is evidence that the universities are moving in the right direction. The UWI and the UG have initiated changes in their administrative structures to meet the increasing demands being made on them. The development plans of both universities address the need for expanded and strengthened outreach programmes including programmes to be delivered through the use of distance education methodologies.

Universities in the Region, however, will need to rethink their role in the light of:

(i) developments in communication and electronic technologies;

(ii) the cost of providing greater access; and

(iii) the greater use that could be made of local and regional resources, including those of other tertiary institutions.

There is also need for a greater degree of consultation between the Universities in the Region and governments about academic developments which will contribute to the development thrust.

In addition, the UWI in particular needs to establish new mechanisms that would provide for greater dialogue with governments especially those of non-campus countries in matters of University policies.

The future calls for institutions "without walls". The changes foreseen will include a new type of student, a new type of lecturer and a renewed emphasis on research.

Criteria for appointment of staff in tertiary and higher education institutions may also need to be changed in the near future. The use of distance education on a mass scale will require a different kind of lecturer. Having publications and a higher degree will not necessarily be sufficient. Professional training and skills in distance teaching will become absolutely essential.

Background Paper No. 3

The new type of student envisaged is mature in thinking and outlook, capable of self directed learning, an independent thinker, and able to research, access and use information intelligently.

The new type of lecturer envisaged will need to be skilled in a variety of teaching methods. "Chalk and talk" must give way to inspired teaching supported by such teaching/learning aids as audio and video tapes, printed materials, radio, television and computers. Course content will need to be packaged appropriately to facilitate self-instruction and individualised learning as far as possible. Further, the University will be required to work with Ministries of Education and Teachers' Colleges in upgrading skills of secondary and primary school teachers for an improved quality of output at these levels.

Finally, there will have to be a renewed emphasis on research which should not be seen as a responsibility of the universities only. Tertiary institutions and the universities will be challenged to work more closely with the work place, school, industry and the community - so that research undertaken will have a more practical focus designed to address needs of national and regional development.

2.4.3 **POLICY GOALS**

- **To forge new roles for the UWI and the UG to meet the demands of the Twenty-First Century in light of:**

  (i) global developments in communications and electronic technologies;

  (ii) the cost of providing greater access to university; and

  (iii) the new thrusts of other tertiary institutions.

- **To improve the mechanisms at the UWI for dialogue with governments in matters of university policies, delivery of services and the needs of its clients (especially the non-campus territories) which cannot be adequately accommodated within current university structures.**

- **To establish easily accessible management information systems for all tertiary institutions in the Region.**

- **To recognise the Association of Caribbean Tertiary Institutions (ACTI) as the umbrella body responsible for the co-ordination of tertiary institutions.**

- **To develop active research programmes in tertiary institutions which both extend the boundaries of knowledge in the areas of specialisation pursued by the institution and inform decision-making related to national development needs.**

2.4.4 **ACTIONS REQUIRED**

- **Simplify** the UWI decision-making processes to ensure quicker responses to the needs of the countries it serves.

- **Establish** databases that make full use of the Labour Market Information systems being developed in Member States and in so doing promote easy access to this information by all tertiary institutions.

- **Utilise** open learning strategies to deliver tertiary instruction at the university level.

- **Establish** gender equity in training, recruitment and decision-making processes at the tertiary level.

- **Establish** mechanisms to monitor and evaluate on-going tertiary level courses and programmes both in relation to the demand for skills and in an effort to maintain quality control.

- **Initiate** programmes for the professional training of teachers at the tertiary level including university lecturers. Participation in such programmes could be made a necessary condition for appointment or promotion. In training, particular attention needs to be paid to:

  i) promoting student-centred approaches;

  ii) adopting a more integrated or inter-disciplinary approach to teaching and learning;

  iii) use of modules and computer-assisted learning;

  iv) use of media in teaching;

  v) skills in preparing distance teaching materials; and

  (vi) development of skills and attitudes appropriate for the effective delivery of distance education programmes.

- **Popularise** and disseminate research findings to relevant users in the Region.

- **Support** the work of the ACTI at both the national and regional

levels in order to achieve goals set in relation to the articulation and accreditation of programmes.

- **Review** linkages with foreign institutions to ensure that the benefits which accrue are mutual. Where these linkages involve staff development through degree programmes, every effort should be made to use the expertise made available through these linkages to train staff locally.

SECTION 3

CURRICULUM REFORM

INTRODUCTION

Educational programmes in CARICOM Member States have expanded considerably over the past two decades, but this expansion has taken place in an unsystematic way, without due cognisance of the issues related to curriculum reform. Policy-makers, aware of this deficiency, have agreed that expansion must take place in the context of curriculum reform at all education levels and by improved quality of teaching.

Among teachers too, curriculum development, implementation and evaluation are on-going concerns. In providing guidance to the students, teachers have to resolve problems of curriculum content, materials, methods and assessment. However, how to tackle these problems systematically is a major concern. A purely trial and error method at a national level can lead to diseconomies in time, expertise and resources too enormous for any one country to bear. These problems point to the need for regional approaches that are cost effective. However, whether a national or regional approach is taken, there is merit in developing new programmes on a pilot basis before introducing them on a wider scale. Such an approach can also foster creative teaching through the deliberate sharing of ideas.

Various definitions of Curriculum:

- C_1 is the curriculum propounded by the experts.
- C_2 is the curriculum for which appropriate textbooks and materials have been constructed or selected.
- C_3 is the curriculum which is put forward by the Ministry of Education.
- C_4 is the curriculum which a teacher actually teaches in the classroom, and there are as many varieties of C_4 as there are teachers.
- C_5 is the curriculum which is being tested by the accepted Examination Boards, and there are as many varieties of C_5 as there are Examination Boards.

Background Paper No. 8

Further, the advent of new information and communication technologies, some of which are transforming human relationships, necessitates rethinking ways of doing things, as well as the creation of new modes of behaviour. To the extent that educational institutions are expected to prepare Caribbean citizens for coping with the challenges of life and for playing new roles in society, it will be necessary for these institutions to reform their curricula and rethink their modus operandi. In the light of a changing environment special attention must be paid to the areas addressed in the following sections:

(i) Culture, Sports and the Arts
(ii) Education for Special Needs
(iii) Language Learning
(iv) Mathematics and Science Education
(v) Technology and the Curriculum
(vi) School and the World of Work
(vii) Adult Education.

SECTION 3.1

CULTURE, SPORTS AND THE ARTS

3.1.1 ISSUES AND CONCERNS

Culture is the way a people think and behave. It is an embodiment of their ideas, their beliefs and values. It is reflected in their art forms, their artistic products and their recreational and leisure pursuits including sport. Given the all pervasiveness of culture, developmental processes must take cognisance of the role it plays in shaping people's thinking and behaviour.

But for all its pervasiveness and its impact on shaping our lives, insufficient attention is paid by policy makers and teachers alike to the importance of culture as a relevant developmental vehicle. Failure to respond to the importance of culture and how it impacts on our lives has led to inappropriate ways of coping with serious ills in the school system. For example, youth alienation from school calls into question the relevance of the curriculum to the culture of the young people. Arts and sports, integral aspects of our culture, have not been accorded pride of place in the curriculum and consequently a vast number of students do not benefit from the softening and nurturing influences of these disciplines.

Lack of appreciation of the role of culture in general, and sports and the arts in particular has led to an undervaluing of the various aspects of our culture in the school curriculum. Inadequate time or no time at all is accorded sports on school timetables. The arts - music, art and craft, dance, drama - are often treated merely as diversions to provide relief and relaxation from the mental demands of "real learning". In those cases where the arts are treated seriously, they tend to become "information and academic oriented".

> The Cave Hill Campus of the UWI has launched a course: "West Indies Cricket History since 1870". The UWI has taken the view that cricket should be the subject of rigorous academic discourse because of the importance attached to organised cricket within popular culture in the Region. Cricket has played a major role in nation building and its history has paralleled the rise of the modern West Indies. Cricket is being used as a mirror in the study of the West Indian society
>
> **Background Paper No. 4**

3.1.2. FUTURE DIRECTIONS

A philosophical understanding of our cultural heritage is required at all levels - school, home and the community. Such an understanding is necessary to ensure that our culture expressed in its many forms, including the arts and sports, is seen as a critical component of the curriculum with the potential to enable our young people to carve a niche in the world economic and cultural scene.

At the school level, it is important to provide students with experiences that will

enhance their appreciation of their culture, make them proud of their heritage and so recognise the value of promoting their culture at home and abroad. School should also enable students to recognise the possibilities of exploiting our culture for economic development, especially at this time when there is a shift in the Region from traditional areas of economic activity to new areas that are service and information based. Effective career guidance programmes in schools are therefore needed to make young people aware of such opportunities.

The CXC has been playing a leading role in the development of the arts in schools. It should now signal its own and emerging Caribbean concept of the arts as a central educational activity by seeking to offer examinations in a wider range of subject areas in the arts.

If importance is attached to the teaching of arts and sports in schools, education policy makers and planners must give serious attention to the provision of special facilities, equipment and materials. Policy-makers, educators, parents and the community need to work together to ensure that culture, especially the arts and sports occupy a central place in the school curriculum and so contribute to the overall development of our young people.

3.1.3 **POLICY GOALS**

- **To foster in the Community an understanding and awareness of the role that our culture can play in economic and social development.**
- **To create an environment which motivates individuals to develop their potential physically, mentally and spiritually.**
- **To enable individuals through education in the arts to develop their natural artistic ability and to develop as well the ability to appreciate and interpret the works of others.**
- **To develop among young people the self-confidence to use their artistic ability to embark on cultural ventures that are viable economically.**
- **To promote an awareness and understanding in the community of sports as a phenomenon that is culturally relevant and as a physical activity which contributes to people's well being.**

3.1.4. **ACTIONS REQUIRED**

- **Use** all forms of media to disseminate programmes designed to sensitise the Community about the relationship between culture and development, both economic and social.

- **Review** the curriculum at all levels of the educational system with a view to:
  - offering greater opportunities for allowing persons to study culture and the arts;
  - developing appropriate ways of assessing and evaluating the arts at all levels of the education system.
  - determining the appropriate content and methodology for teaching the arts at all levels of the education system.

- **Promote** at all levels of the education system the integration of physical education in the core curriculum.

- **Utilise** more fully the GC Foster College in Jamaica for the professional training of physical education instructors.

- **Create** opportunities for successful sportsmen and women from the Region to share their expertise with young people and to be role models.

SECTION 3.2

EDUCATION FOR SPECIAL NEEDS

3.2.1 ISSUES AND CONCERNS

> Changing attitudes particularly towards the handicapped in our societies is a major challenge that we have to face as we move towards the twenty-first century.
>
> **Background Paper No. 5**

Educational policies in the Region voice commitment to the education of all citizens. However, educational priorities tend to cater for the needs of the "normal" or "average" children. Gifted children, slow learners or children with disabling conditions such as hearing impairment, physical disabilities or communication disorders are often neglected.

A number of reasons account for this. Unlike at the primary, secondary, tertiary and higher education levels, special education has no strong advocates, especially where decisions are taken about financial allocations for education.

Owing to lack of recognition and advocacy, the provision of educational services for special education is often left to private initiatives that vary widely in quality, effectiveness and efficiency. Accordingly, there is compart-mentalisation of effort, fierce competition for scarce resources, and lack of coordination and continuity of effort.

> What often remains unrecognised is the fact that there are learners with special needs at every level of the education system. There are many slow learners in our universities and colleges whose needs are invariably neglected by lecturers.
>
> **Background Paper No. 5**

Another reason for the lack of attention given to special education is that the criteria used for determining those with special needs are ill-defined. Consequently, this category of students is often under-represented.

Cost is another factor. Special education requires lower teacher to pupil ratios, specially trained teachers, clerical and counselling support services, specialised buildings and equipment and a wealth of resource materials. These requirements point to the need to explore alternative, cost-effective ways to deliver special education.

Perhaps the biggest problem to be tackled in this area is that of negative attitudes. Many parents with disabled children feel ashamed and go to every extent to conceal this fact. The attitude of teachers towards gifted children is also a concern. There is a tendency to neglect these children who, they claim, will shine above the others in

any event. By not making special provision for accelerated or enrichment programmes that challenge gifted children, we fail to develop their potential to the fullest.

3.2.2 FUTURE DIRECTIONS

Against a background of economic constraints, governments are unlikely to be able to sustain the high cost of special education. Alternative strategies, therefore, need to be devised for providing services in this area.

Such strategies must be focused on changing attitudes towards people who are perceived as abnormal. We need to nurture in our young people a perception of the world as consisting of people who are different in many ways, and it is those differences which make the world as varied, interesting and rich as it is in its myriad ways. The disabled, the slow learner and the gifted are not abnormal; they are simply different. They too have aspirations, hopes and dreams and they too have special gifts to bestow on society. We need to help them to achieve their aspirations, realise their dreams and make their special contribution to society.

Such attitudes and perceptions are best nurtured in situations where all children learn in the same environment. This necessitates that mainstreaming be much more effectively and efficiently managed. In addition, the teachers of these children will need to acquire new skills. Specialist teachers will still be needed, for example, in cases of severe hearing impairment, speech disability and multiple disabilities. We need, however, to adopt approaches to teacher training which give each teacher a solid grounding in the pedagogical skills required for teaching a wide range of abilities.

> The goal of Community-Based Rehabilitation (CBR) is to demystify the rehabilitation process and give responsibility back to the individual, family and community. The experience of CBR in Guyana has shown that it is possible to give the community a pivotal role in providing services for children with special needs particularly in rural areas where such services are not usually found.
>
> **Background Paper No. 5**

These teachers must be provided with adequate support services. They should have a variety of teaching-learning resources, including computer software suited for different ability levels and enrichment materials. Centres that provide diagnostic and prescriptive services should be at their disposal. The community should also provide some support. For example, parents with special skills should be able to assist the teacher with small group activities, and volunteers could provide general help in the classroom as teaching assistants.

The education of parents is critical and the media can be used effectively to change the attitudes of parents and the society in general towards the handicapped. The focus should be in allaying the fears of parents and creating an awareness of the support services available for their children. Parents of slow learners and gifted children should be made aware of the role they have to play in their children's education, not only in helping with and supervising

homework, but also in taking initiatives to provide activities and experiences that enhance the education of their children.

The thrust in the future should be towards relieving the teacher of the full burden of educating children with special needs and making this a responsibility which is shared by the children themselves, their parents, the teacher and the community.

Finally, special education provision has tended to be limited to children between the ages of 3-16. We need to do more for adults with special needs. Some Member States have skills training programmes for such adults, and it would be useful to share information on the effectiveness of these.

But there are many questions still to be addressed as we attempt to provide education for all, for example, how are the disabled integrated into the working world of Caribbean societies? What problems do they encounter? How can the Region pool its resources to further the interests of the disabled?

3.2.3 POLICY GOALS

- **To provide an appropriate educational climate and curricula for those with special needs to develop their potential to the fullest.**
- **To adopt a regional approach to introducing an alternative mode of delivery for cost-effective special education.**
- **To harness the resources of the community in providing services for children and adults with special needs.**
- **To develop positive attitudes to all persons with special needs.**
- **To provide for the disabled school leaver and adults, training programmes that will enable them to be productive and to live their lives with dignity.**

3.2.4 ACTIONS REQUIRED

- **Provide** adequate support services for special education at national level and explore possibilities of sharing resources on a regional basis.

- **Develop** support materials for teaching gifted and slow learners.

- **Establish** partnerships between government and private interests to provide services for persons with special needs.

- **Devise** and implement community-based approaches to providing services for disabled children and adults. Document the experiences and disseminate outcomes Regionally.

- **Incorporate** in teacher training programmes, courses which prepare trainee teachers for meeting the needs of gifted children and slow learners.

- **Include** in teacher training programmes a core course in special education which gives teachers skills in diagnosis and mainstreaming.

- **Assess** the extent to which the Mico College in Jamaica serves the needs of the Region for trained special education teachers and determine what provisions need to be made for training in special education in individual Member States.

- **Conduct** state of the art reviews of alternative models of delivery of special education services that have been tried internationally. Disseminate the findings regionally.

- **Review** the practice of mainstreaming with a view to ascertaining with which categories of the disabled it works best and under what conditions.

- **Conduct** case studies of skills training programmes for the disabled.

- **Document**, using contemporary media, successful strategies for teaching the gifted and slow learners in primary and secondary schools.

- **Disseminate** the findings of these case studies and documentaries to Member States.

- **Develop** training modules for those who wish to set up CBR programmes in the Caribbean.

SECTION 3.3

LANGUAGE LEARNING

3.3.1 ISSUES AND CONCERNS

Concern with language and communication in CARICOM Member States has focused on what is presented as low literacy skills in the school population and among persons who have had the benefit of secondary education. Interwoven with this concern is anxiety over the faulty command of the official language exhibited by persons in public office, by civil servants, professionals of various kinds, radio and television presenters and a wide variety of persons who have had the benefit of secondary and tertiary education at state expense.

Other concerns have focused on the desirability of emphasis on the vernacular languages in the social fabric of the Region, how to accommodate ethno-specific languages within the new nations, and the need to break the barriers associated with language difference.

These concerns persist for a number of reasons. There is no clearly articulated language policy that recognises that English is not the natural language of the majority of students, that all languages present in a society are equally valid and that multilingualism or multi-dialectalism are positive attributes. In addition, anxiety over the performance of the education system is often reflected as anxiety over literacy. Yet there are no reasonable measures for literacy in the Region. The evidence of illiteracy has been anecdotal rather than empirical and the measure of what constitutes adequate literacy skills has been variable and often specific to the commentator. Illiteracy has been confused with inadequate general knowledge of English grammar and idiom; and problems associated with general learning disabilities have been attributed to the absence of literacy skills.

As far as the teaching of English is concerned, this has proceeded from incorrect assumptions, both about the access that members of the society have to the language and about the purposes for which they want and need to use it. Educators have been seduced by the artistic aspects of the performance of English and have fostered awe of the language rather than recognised and promoted the utilitarian purposes of the language for ordinary communication.

The teaching of foreign languages is another concern identified in the Region. This is largely book and classroom oriented. The result is that the presence within the community or proximity of speakers of relevant languages has not generally been an important factor in the teaching approaches employed in schools. Experiences at school do not fire young learners with enthusiasm for acquiring foreign language competence.

> The native language of a person is that language which the person has never had to learn consciously, but which the person has naturally acquired through interaction with his/her social environment. By school age, every child, if not retarded or disabled, has acquired his/her native language.
>
> **Background Paper No. 6**

The place of the vernacular and ethno-specific languages in the schools is another issue that must be addressed with some urgency. The monolingual bias of speakers of English has led to an under utilisation of the multilingual resources of the societies and projected them as divisive disadvantages rather than enriching advantages. Efforts towards the reversal of this unfortunate circumstance must shape the framework within which the Community formulates its policies and programmes on language.

3.3.2 FUTURE DIRECTIONS

Research work done in the Region has produced a wealth of findings that can inform policy and practice for language teaching and learning. We need to initiate ways of making that research available to policy makers and to trainers of teachers so that it can impact on language policy decisions and on approaches to language teaching in the training colleges.

An immediate need is the determination of a reasonable set of measures for literacy. The skill of literacy must also be recognised as a portable technology and measures which distinguish literacy from adequate knowledge of specific languages should also be determined, based on research findings.

Interventions are also required for the training of teachers to deal with problems of reading, for the learning and teaching of English, the teaching of native languages and the teaching of foreign languages.

The current practice of having general purpose teachers at the primary level to deal with special problems in developing children's reading skills is inadequate. Specialist teachers of reading are required since they would have the skills necessary to identify those learning problems that might require intervention.

The learning of English poses special difficulties. Because West Indian learners of English with creole or creole-related backgrounds are not native speakers of English, the teacher of English has to be able to assist these students to acquire additional competence which non-native speakers cannot be expected to acquire without special attention. Educators need to examine the research work and projects undertaken in the last thirty years in this area to determine what worked, why efforts were not sustained and what strategies are required for a concerted sustained effort in order to achieve meaningful impact.

In addition, it needs to be accepted in the Caribbean that an educated person ought to be able to use a linguistically valid writing system for representing the creole language or the creole related vernacular of his or her background.

> Much harm is done in education by incorrect diagnosis of problems and there is little doubt that literacy is especially prone to mis-analysis both because of the intrinsic difficulties of definition and because of the difficulty of separating knowledge of the skills of literacy from knowledge of the language through which it is expressed.
>
> **Background Paper No. 7**

> One important departure from tradition that needs to be made is in the conception of the modern language teacher. Tradition requires many years of formal education and training, much of the latter being ancillary to the task of inducing communicative competence in a learner. The needs of the Region are such at the moment that the time and wastage involved in the traditional approach to training can no longer be afforded. What is necessary is the funding of a breakthrough that will recruit potential modern language teachers as rapidly as possible in the required number and train them quickly.
>
> **Background Paper No. 6**

The learning of foreign languages is another concern that must be addressed given the need to demolish internal and external language barriers. To do so, the most intractable problem the Region faces is the dearth of foreign language teachers. However, strategies to address the concerns about foreign language teaching must go beyond the traditional methods used for the training of teachers. There is need for programmes to develop public awareness of the value of being competent in foreign languages; short intensive courses to create competence in a relatively large number of persons who could immediately begin functioning at a late primary or early secondary level as foreign language teachers; and short programmes on teaching methodologies.

The vernacular language of the Region must also be accommodated within the instructional activity of the Region. However, in the first instance, the public acceptability and utilitarian profile of the vernacular languages must be changed by having them used as media of public information. In each country of the Region, all the languages which are commonly used by citizens, should be used for the purpose of public information.

Finally, the need for an analysis of the research done in this area, an identification of the lessons that can be learnt and continued research in the field must be emphasised. Funding and a commitment from governments to facilitate the implementation of experimental projects are necessary to tackle in any meaningful way the issues and concerns requiring urgent attention in the teaching and learning of language.

3.3.3 POLICY GOALS

- **To ensure that by the age of ten, children are competent in the use of the official language of their country at a level appropriate to their age and experience.**

- **To recognise all the languages in use in each society as equally valid and to see multilingualism and multi-dialectalism as positive attributes.**

- **To produce secondary school graduates who can:**

  (i) use the English language with competence in different situations and for a variety of purposes; and
  (ii) use and understand a linguistically valid script for representing the creole or creole-related vernaculars of their communities.

- **To introduce the learning of a foreign language in the upper levels of the primary system by 1998.**

- **To increase the number of candidates taking a foreign language at CXC to 50 per cent of the total number of entries by the year 2000.**

3.3.4 ACTIONS REQUIRED

- **Replace** the routines of tradition as the guide for language teaching with a firm commitment to empiricism and the use of the language experience approach to the initial teaching of reading and writing.

- **Establish** reasonable measures for literacy in the Caribbean Community.

- **Equip** the primary level with specially trained teachers of reading and language.

- **Extend** the period over which formal instruction in reading skills is provided beyond the infant level to a level to be determined by careful re-examination of the instructional goals and procedures of the school system.

- **Foster** cross-boundary communication through the use of languages which are already established vernacular languages.

- **Provide** opportunities for any citizen to learn any of the languages of the community and encourage multilingual control of community languages by citizens, including public officials.

- **Remove** from broadcasting policies of the governments, the stereotyping of languages other than the official language as being solely a medium of entertainment and amusement. Public use of these languages must become part of the effort to remove internal language barriers.

- **Evaluate** the practical procedures and materials developed in the Region since the 1960s for the teaching of English to creole speakers and disseminate the results to audiences in the Region which have responsibility for the training of teachers of English.

- **Design** a core training programme for teachers of English, with reference to the evaluation results referred to above.

SECTION 3.4

MATHEMATICS AND SCIENCE EDUCATION

3.4.1 ISSUES AND CONCERNS

The main issues and concerns relating to the teaching and learning of mathematics and science in schools have to do with methodology and assessment, the learning environment, grade level norms in achievement, and teacher training.

> The issues in teaching mathematics that should be addressed are:
>
> - the emphasis and feel that are appropriate for different groups of students with different abilities, interests, and career orientations;
> - the skilful weighing that should be assigned to the various reasons for studying mathematics; and
> - how to teach mathematics so that it is learnt as a way of thinking, communicating, reasoning and representing.
>
> **Background Paper No. 8**

Mathematics teaching in the Caribbean is characterised by an expository style with an emphasis on the memorisation of facts. This makes limited provision for the interchange of ideas with students and offers insufficient opportunities for students to gain more than a restricted view of the subject. Restrictive assessment practices which tend to focus on the written test also contribute to insufficient numbers of students acquiring mastery of mathematics as an important communication tool.

What should students in their first year of secondary school know and be able to do in mathematics and science which would not have been expected of them in the fourth grade of primary school? This is a question that neither mathematics nor science educators in the Region can answer with any ease. The absence of grade level norms in achievement in mathematics and science is a serious problem that affects both teaching and learning in these subjects. Indeed it may be contributing to the problems that primary school students experience in mathematics in such areas as addition and subtraction of whole numbers, doing word-problems, carrying out operations with fractions, dividing whole numbers by whole numbers and using place value concepts.

The 'one right way' of doing things is a weakness in the methodologies employed by both mathematics and science teachers. For example, by restricting themselves to the use of 'recipe type' activities in the laboratory, and by adhering strictly to the 'scientific method', teachers fail to expose students to the inspiration, imagination, excitement, creativity and often the disappointments which scientists who have made great discoveries experience.

The teaching of primary science in the Caribbean Community has been dominated by the process approach which is intended to provide experiences for a systematic development of skills. The teachers, however, have found it difficult to provide for the continuity of content in using this approach. The tendency for assessment practices to test for knowledge of content rather than acquisition of skills has exacerbated the problem. Furthermore, effective use of the process approach has been marred by the limitations in their knowledge of science concepts on the part of most primary school teachers. These teachers tend to shy away particularly from aspects of science related to physics. Other factors which may be impeding teaching and learning in science are the cultural beliefs and superstitions of students and teachers about science.

The shortage of science teachers at the secondary level, especially in the area of physics, the lack of provision of basic equipment and materials for the teaching of science and inadequate laboratory facilities in many secondary schools are also causes for concern. Furthermore, neither primary nor secondary school teachers, in general, are very knowledgeable about the conceptual demands of their science syllabus and therefore tend not to use the most appropriate strategies and methods for effective learning. Over-generalisation often occurs as in the case of the use of discovery learning as a method appropriate for teaching any aspect of science. This is a weakness that teacher training programmes have to address.

Teacher training programmes in science tend to be narrow in focus in that they are geared for training in traditional areas - biology, chemistry, physics. A consequence of this is that the school system is not laying the foundation for the creation of a pool of persons with the scientific and technological capability that is needed to enhance the development of the Region.

3.4.2 FUTURE DIRECTIONS

If the teaching of mathematics and science in Caribbean Community schools is to improve to enable students to achieve mastery of these subjects, teachers must emphasise problem-posing, problem-solving and the development of higher level thinking skills as the most important goals of studying these subjects. They must teach for understanding and not purely for the memorisation of facts or the rapid performance of calculations and arrival at 'scientific truths'. It is of critical importance that teachers recognise that there is no one 'right way' of doing mathematics or of finding a solution to a problem in science. Error-making is an important heuristic for activities such as problem-solving and problem-posing.

Mathematics literacy, like scientific literacy, requires much more than the acquisition of certain skills and items of knowledge. Both demand that each person acquire meaning, understanding and insight associated with the mathematical or the scientific process; and they demand that each person conceive of mathematics and science as ways of thinking that can profitably be applied to everyday activities be they in

the home, the workplace or in the society at large. A major implication of this is that the image of mathematics and science as bodies of fixed and unchangeable content, which is passed on convergently to the learner by the teacher, has to be abandoned.

> The available evidence shows that the way mathematics is taught in schools and the materials used for teaching it, have tended to remove mathematics from the conscious minds of persons in the community, for example, the housewife, the farmer, the construction worker, the mother, the father. When mathematics is taught away from the context in which the subject occurs in real life, learners may acquire skills needed for doing computations and simple applications, but will seldom be able to apply their mathematics to everyday problems.
>
> **Background Paper No. 8**

> Mathematics and science teaching need to employ multi-sensory approaches - listening to teachers talk, using visual representations, studying physical modelling and acting out mathematical and scientific ideas.
>
> **Background Paper No. 8**

Mathematics and science teachers need to develop a repertoire of strategies that will accommodate the different styles that pupils have of learning and doing mathematics and science. Computers and calculators should be used not only to help consolidate and practise fundamental skills and routines, but also in an effort to encourage students to explore, investigate and experiment with ideas in mathematics and science. The use of modern technologies should also aid in the integration of mathematics and science with other subjects in the curriculum.

The rapid development of technology has not only given rise to the need for the inclusion of technology studies in schools' curricula, either separately or in combination with science courses, but it has also pointed to the need for the creation of a pool of persons with skills and abilities that span the fields of mathematics, science and technology (for example biotechnology, computer science, electronics). This has implications for both the content of secondary schools' curricula and the training of teachers.

In order to promote more positive attitudes towards mathematics and science, the teaching of these subjects should be contextualised so that the learner will not only see how they relate to his or her life and life in general, but also will be able to apply mathematics and science in solving everyday problems.

3.4.3 POLICY GOALS

- **To equip persons with the mathematical and scientific skills and knowledge needed to deal with everyday real-life problems.**
- **To develop in persons ways of thinking and reasoning which would serve to support and enhance their social and economic life.**
- **To inculcate in persons certain values and attitudes that will enable them to participate in the progress and development of their communities and of the Region at large.**
- **To broaden the base of training in mathematics, science and technology in order to meet the demands of technological advancement in society.**

3.4.4 ACTIONS REQUIRED

- **Reorient** programmes for the training of teachers in mathematics and science with a view to achieving:
  - (i) the development of skills for teaching problem-solving, higher level thinking, conceptual development and understanding;
  - (ii) the use of multi-sensory approaches;
  - (iii) the creative use of technology;
  - (iv) models of teaching which encourage explanation, investigation, experimentation, imagination.
- **Stimulate** regional cooperation in the production of appropriate teaching/learning materials for use in mathematics and science teaching at different grade levels.
- **Introduce** changes in the purposes, methods and uses of assessment at the classroom and school levels so that these are consistent with the innovative methodologies devised for teaching mathematics and science.
- **Encourage** Caribbean mathematics and science educators to use regional and international organisations in cooperative ways to address problems in the teaching of their subject.
- **Support** activities in the region designed to popularise science and technology.

- **Upgrade** to satisfactory levels the facilities, provisions and learning environments for mathematics and science in schools in the Region.

SECTION 3.5

TECHNOLOGY AND THE CURRICULUM

3.5.1 ISSUES AND CONCERNS

In this the last decade of the twentieth century, a transformation in human relationships is on the way, due in large measure to the mediating and consciousness-altering role of new information and communication technologies on a global scale. The proximity of North America has exposed Caribbean countries to the more potent forms of information and communication technologies with the result that the use of satellite television, video cassette recorders, and programmed videotape have guaranteed virtual universal access to visual media content that originate primarily from external sources.

> If the Caribbean Community wishes to avoid global marginalisation, an essential task of formal schooling in the Twenty-First Century will have to be to consciously socialise the young to be producers as well as consumers of information as a commodity. This will necessitate familiarisation with and mastery of the physical and intellectual tools that extend our capacity to relate to our environment.
>
> **Background Paper No. 9**

The developments in technology impact on what happens in schools. Early responses to the greater access to visual media characterised these developments as a new form of imperialism-cultural imperialism. It was believed that a deliberate attempt was being made to subvert the Region's culture by submerging it in and overwhelming it with Hollywood images. It is now becoming clear that what was perceived as a regional phenomenon was in fact a nascent global phenomenon.

Schools reacted to this perceived cultural imperialism by recognising that renewed efforts were necessary to preserve the cultural heritage of the people of the Region. However, the question of how the new technologies can be used as a means of learning and of delivering programmes presents new challenges to educators in the Region. Information and communication technologies require different kinds of curriculum materials, teaching methodologies and information processing. The area is relatively new but educators need to rise to the challenge to make use of the technologies that are now available.

> With the single and important exception of the UWIDITE, the CARICOM Region has all but ignored the application of the new information and communication technologies systematically to achieve formal educational objectives, let alone to entering the Information Age competitively. And even in the case of UWIDITE, the use of these technologies is not being maximised but rather is limited essentially to audio-conferencing at a very basic level.
>
> **Background Paper No. 9**

The new technologies available in the Region can also be used by institutions in a collaborative effort to expand access to programmes through distance education. Harnessing the resources available for human development efforts requires serious and immediate attention. Already, the contours of a new polarised world are beginning to emerge between the information rich and the information poor; between those who generate and use information and those who merely consume information in non-productive ways. One essential point of intervention to begin to close this gap is at the school level.

3.5.2 FUTURE DIRECTIONS

In order to meet the challenges posed by such technologies, educators need to address two dimensions of these technologies: the theoretical and the technical.

The theoretical dimension refers to the critical study of communication - "Media Studies" - as a subject within the school curriculum. More particularly media studies must deal with the role and impact of media on communication processes in society. The content and methodology should reflect attempts to answer the questions: How do media affect our relationship with our environment? Also, if we accept that technologies are physical and intellectual tools that extend our capacity to relate to our environment, how do media technologies do this?

In developing communication as a subject, the media become the hardware, its content is the software and the communication process provides the subject matter for critical reflection. Curriculum development work in this area is urgently needed and regional strategies can be used for piloting projects and developing a common curriculum.

The technical dimension has two aspects: the creative and the utilitarian. Both aspects are essential in the school environment. There is great potential in the use of technology to enable students to develop creative skills. If required to present information and carry out projects that are not print based, the students will be developing new skills and exploiting new forms of communicating.

> Continued reliance almost solely on the medium of print not only fails to maximise the use of available media resources within education, but also prevents otherwise visually and audially literate persons from benefiting from participation in the formal education enterprise. Instead, such persons are left to the powerful socialising influence of the entertainment mass media - with all that implies for the shaping and reinforcement of values which may not always be consistent with national or regional educational goals or cultural practices.
>
> **Background Paper No. 9**

The utilitarian aspect has to do with how programmes can be delivered. At the school level the teacher can exploit the information processing skills which the students have acquired in their use of the popular media. The strategies used to convey messages through the medium of television for example, are powerful strategies that can be employed by the teacher. To ignore the potential of this medium, in particular in the formal education enterprise, is to make the task of teaching contemporary youth much more difficult, since the teacher has to compete against the television and other media in the environment in order to gain the students' attention.

The utilitarian aspect also has implications for improving access to programmes. Satellite broadcasting and cable television are quite commonplace throughout the Region. The distribution infrastructure is already in place. The challenge is for policy-makers and educators to utilise these resources for developing non-traditional education delivery systems for the purpose of human development.

3.5.3 POLICY GOAL

- **To maximise the use of information/communication technologies in all dimensions and aspects of the national and regional education systems.**

3.5.4 ACTIONS REQUIRED

- **Use** all available communication technologies to extend the capacity and reach of limited skilled personnel across time and space as an immediate way to supplement capacity and upgrade capability.

- **Develop** Media Studies in the formal school curriculum throughout the Region as a means of socialising young people in the realities of the **Information Age**.

- **Use** non-print media in normal educational activities as complements as well as alternatives to print.

- **Incorporate** the use of regional and global computer databases as sources of up-to-date information in educational institutions.

- **Train** teachers to utilise multi-media in teaching/learning situations.

- **Train** technologists to service and maintain equipment used in schools.

SECTION 3.6

SCHOOL AND THE WORLD OF WORK

3.6.1 ISSUES AND CONCERNS

A major challenge that faces the Caribbean in the Twenty-First Century is how to tackle the problem of youth unemployment. Attempts to address this problem have in the pást taken the form of including technical vocational education and training (TVET) courses alongside academic subjects in secondary schools, introducing work experience or work study programmes and setting up special agricultural schools.

The outcomes of these programmes in the formal education system have fallen short for a number of reasons. A CARICOM survey on TVET revealed that some of these reasons are lack of liaison between education and manpower planning, negative attitudes towards TVET and inadequacies in the basic knowledge of students doing technical/vocational subjects. Lack of workshop space, poor maintenance of machines and equipment, inadequate supply of materials, the inability of schools and tertiary institutions to obtain staff qualified to teach technical/vocational subjects and the sex-role stereotyping of occupations and career choices are other problems faced by these programmes. These problems are further exacerbated by high costs and pressures from the international community to shift resources to general and basic education.

> Negative attitudes towards skill and vocational training as well as deep-seated value systems that reject any work that is physical or manual lie at the heart of difficulties in putting technical/vocational education on par with the academic type of education offered by traditional high schools in certain Member States.
>
> **Background Paper No. 10**

> The preparation of women along traditional lines to function only in the feminised occupations is self-defeating and can only serve to perpetuate the sex-stereotyping syndrome . . . and train women for unemployment rather than employment since these traditional feminised occupations are already over-supplied and can hardly absorb additional workers.
>
> **Background Paper No. 10**

The findings of the CARICOM Survey also indicate that skills training programmes in the non-formal system have proven relatively successful in enabling participants to secure jobs more readily. The closer link between the training given and the needs of the work-place may account for this. These programmes are also cost-effective in that, having on-the-job training, enables trainee-workers to get experiences in the use of modern equipment and technologies which the formal education system cannot afford.

The programmes, however, are not without their difficulties. They do not usually attain a suitably high standard of training partly on account of the assumption that the participants in the programmes tend to be low achievers or school 'drop-outs' who have limited motivation for further training. The shortness of the period of training and the lack of recognised certification on completion of training in most cases are other problems faced by the non-formal system.

> The ideal would be for the formal and non-formal systems to work closely together to train young people for employment. Jamaica's HEART programme and the Junior Achievement Programmes which operate in certain Member States have shown how this is possible.
>
> **Background Paper No. 10**

Past experiences in training young people in both the formal and non-formal systems indicate that regardless of the approach taken, problems are invariably encountered in securing paid employment and in getting young people involved in self-employment enterprises. This suggests a need for the development of an entrepreneurial culture as an important strategy for both job creation and economic advancement in the Twenty-First Century.

> Entrepreneurs are people who have the ability to see and evaluate business opportunities; to gather the necessary resources and take advantage of them; and to initiate appropriate action to ensure success. Entrepreneurs are action-oriented, highly motivated individuals who take risks to achieve goals.
>
> **Background Paper No. 10**

3.6.2 FUTURE DIRECTIONS

A Regional Strategy for TVET was endorsed by the SCME in 1990. It provides actions necessary to address the concerns identified in the CARICOM Survey on Technical and Vocational Education and Training. However, the successful implementation of the strategy requires a commitment from the Governments of the Region to continue to invest in TVET in order to prepare young persons at the secondary level for training in the specialised and para-professional areas at higher levels.

In order to meet the demands for more skilled persons, especially at the para-professional level, new and creative strategies will be required to address concerns of access, partnership arrangements with industry and career opportunities.

Access can be improved by developing and implementing flexible programmes that are not necessarily institution-based. Some of the strategies that can be employed include distance education and linking formal and non-formal programmes to maximise use of available

resources. With the assistance of The Commonwealth of Learning, persons involved in TVET are already gaining knowledge and expertise in the delivery of certain aspects of skills training programmes through the use of distance education methodologies. There is great potential in the use of these methodologies and regional efforts are required for training of instructors and the development of curricula and materials.

Partnership arrangements are also required in efforts to prepare our young people for the world of work. The arrangements offer a wide range of possibilities. For example, institutions can deliver programmes to meet specific needs of industry by using the workplace as the learning site; persons from industry can deliver elements of a programme at institutions; students can conduct research to assist in solving specific problems identified at the work place; industry and institutions can share responsibilities for training for entrepreneurship, and attachments at job sites can enable instructors to learn new technologies and upgrade their skills.

Finally, given the rapid changes that are taking place in the workplace owing, in large measure, to the rapid advances in technology, the links between institutions and manpower planning must be strengthened and systematic programmes for vocational and career guidance implemented. In addition, young people will need skills to enable them to adapt to and cope with career changes. Desirable attitudes towards learning are therefore critical in all graduates at the various levels of the school system.

Through partnership programmes, business/industries can share responsibilities for skill development, contribute financially and share expertise and resources. Partnership programmes can be fostered in a variety of ways such as:

- job placement;
- work attachments;
- advice on courses;
- donation of equipment;
- part-time teaching staff;
- financial assistance.

Regional Strategy for TVET

3.6.3 POLICY GOALS

- **To coordinate and manage effectively TVET activities in the Region.**
- **To develop an information base for the formulation of plans, employment policies and for giving direction to the development of TVET in the Region.**
- **To enhance the status of TVET as a viable career path.**
- **To offer more effective career guidance in TVET in schools.**
- **To review, upgrade and extend TVET offerings at different levels in the education system.**
- **To develop an entrepreneurial climate throughout the Region.**
- **To promote gender equity in job training and greater career opportunities for women.**

3.6.4 ACTIONS REQUIRED

- **Demonstrate** at national and regional levels greater commitment to the Regional Strategy for TVET.
- **Train** persons responsible for the coordination and management of TVET.
- **Establish** linkages among the various Ministries, institutions and agencies with responsibility for training.
- **Develop** and strengthen the Labour Market Information System in Member States.
- **Implement** a programme to stimulate public awareness and to promote positive attitudes towards TVET.
- **Strengthen** programmes for training TVET instructors at all levels of the education system throughout the Region.
- **Train** guidance counsellors to deliver effective vocational and career guidance in TVET.
- **Develop** partnerships between education and training institutions, professional associations, the private sector, governments and international agencies for the training of entrepreneurs.
- **Improve** the salary and working conditions of TVET instructors.
- **Actively** promote gender equity in job training and career opportunities.

SECTION 3.7

ADULT EDUCATION

3.7.1 ISSUES AND CONCERNS

Across the Region, adult education takes place in an ***ad hoc*** manner. At a formal level it is offered at institutions and at a non-formal level by community groups, organisations and the private sector, with minimal linkages between both types of programmes. Some of the specific issues and concerns that must be addressed are related to these institutional arrangements and the content and methodology of the programmes offered.

Formal adult education programmes have two main functions: a compensatory function to provide opportunities for those who for one reason or another were unable or failed to complete their formal secondary education; and a developmental function to provide opportunities for continuing professional education. However, these programmes pay little attention to other adult education needs such as preparation for the world of work, identification of career goals and options, personal development and inter-personal relations.

Effective programme delivery is constrained by the use of methodologies that are inappropriate for adult education. For example, the same strategies, teaching methods, modes of assessment, rewards and sanctions used at the secondary level are usually applied in adult education programmes. The emphasis is on the transfer of knowledge from the teacher to the student and there are few opportunities for the use of creative and innovative approaches to teaching and learning.

> Any vision of an education that is seen to be necessary and appropriate for equipping Caribbean Community citizens to survive and live meaningful lives in the Twenty-First Century, must be informed by an understanding of the important place of adult education in shaping the future of CARICOM. If adult education is to play its role alongside and not behind the education of children, serious attention must be given to its content and delivery, to how it is administered and managed, and to ensuring that it caters to adults at all levels of the Caribbean Community.
>
> **Background Paper No. 11**

The private sector is also involved in providing education to persons employed and those seeking employment in this sector. The focus of private sector organisations is on training and retraining for improved job performance and increased productivity. Much of this is carried out in isolation, with minimal links to formal education institutions and is often not conducted by trained educators.

Background Paper No. 11

Non-formal education programmes are accorded low status even though they make a significant impact in meeting specific learning needs and are often targeted to job-related skills. Linkages between the formal and non-formal programmes can be mutually beneficial for sharing resources, developing programmes and providing a framework to achieve much needed coherence in adult education activities.

3.7.2. FUTURE DIRECTIONS

In order to address the common issues and concerns of adult education in Member States, regional cost effective approaches and a well-articulated policy for adult education are necessary. Such a policy is required especially in the context of severe economic difficulties being experienced in the Region. This position is supported in the Grand Anse Declaration of 1989 in which special value was placed on human resource development as a strategy for exploiting new opportunities arising in the services sector through the development of information technology. Adult education must therefore be seen as a critical element of any strategy or programme for development.

Institutional linkages within a policy framework will be required for developing and expanding programmes that will focus on areas such as development of marketable skills, community building, problem solving and conflict resolution.

In addition, programmes will be required for special groups. For example, serious attention must be paid to education for parenthood and to the education of teachers.

Teacher training programmes tend to deal mainly with intellectual development and academic credentials of student teachers at the expense of the development of affective, social, cultural and spiritual aspects of their personalities. All teacher training programmes in the future should be viewed as adult education programmes and attempts must be made to adopt methodologies and to use strategies that are appropriate for adult learning.

> In every society it is the adults, not the children, who are responsible for deciding and charting the course of the country's development. It is they who promote, initiate or retard change. It is they who either manage and cope successfully with change, or who are crushed and devastated by it. It is they who must be equipped with the knowledge, skills and attitudes needed to be able to set and achieve the goals of national development.
>
> **Background Paper No. 11**

Policy-makers and planners can also benefit from special adult education programmes which should include elements such as personal development, people-centred development, responsible and courageous leadership, management principles and practices, participatory planning, team building and managing change. Further, a participatory training methodology will be required to expose and involve policy-makers in a dynamic process of dialogue, discussion and reflection.

In order to enable more adults to access programmes, use must be made of the communication technologies available in the Region. Programmes can be developed for delivery through the use of the popular media. Distance education programmes using a range of methodologies, will also facilitate the expansion of programmes to the adult population.

Finally adult education, like other areas of education, must be informed by research. Collaboration among institutions in research activities is necessary in order to obtain data for making decisions on content and methodology that are appropriate to the needs and characteristics of adult learners. Evaluation studies are required to determine quality, efficiency and effectiveness and to guide curriculum reform that is needed for adult education.

3.7.3 POLICY GOALS

- **To improve and expand education and training opportunities offered to adults in the Region.**
- **To develop and implement regional approaches for delivering adult education that will enhance the capacities and competencies of the adult population of the Region.**

3.7.4 ACTIONS REQUIRED

- **Develop** a regional policy for adult education.
- **Establish** Departments of Adult Education within Faculties of Education at the University of the West Indies and the University of Guyana to offer courses of study in

Adult Education at the certificate, diploma and degree levels.

- **Review** the content and methodology of existing programmes at formal and non-formal levels.

- **Establish** linkages between the formal and non-formal sectors to facilitate the development and articulation of programmes.

- **Develop** programmes for particular groups of adults, for example, parents, policy makers and planners, as well as for those who have retired, or whose jobs have become redundant, so that these adults can acquire new skills and adjust quickly to new job opportunities.

- **Incorporate** into adult education programmes components geared to adults with special needs.

- **Incorporate** adult education modules into teacher education programmes.

- **Develop** programmes for training teacher educators to deliver adult education.

- **Use** available communication technologies for expanding programmes offered to adults in the Region.

- **Develop** adult education programmes for delivery by the popular media.

- **Conduct** research that will inform policies and programmes for adult education in the Region.

SECTION 4

TEACHER EDUCATION

4.1 ISSUES AND CONCERNS

Concerns about teacher education are embedded in a complexity of issues. These include the relevance of the programmes for teaching, the relationship between teacher training institutions and schools, the availability of suitable candidates, the socio-economic environment, and the terms and conditions of service of teachers.

> The conditions under which teachers have to work today have created the need for psychological counselling to help them cope with stressful situations caused not only by general indiscipline, violence and drug abuse but also by the burden of work falling on fewer teachers in a context of wide-spread teacher shortages.
>
> **Background Paper No. 2**

A major concern which affects the performance of teachers has to do with the relevance of teacher training programmes to the reality of the classroom situation. The problem is that teachers find that a great deal of the knowledge and skills which they acquire in college is not transferable to the classroom. One reason for this dilemma is that in many instances the relationship between the teacher training colleges and the school is limited to occasional visits and teaching practices.

Coupled with the gap which exists between the world of the classroom and the teacher training institution are the inadequacies of programmes for helping teachers to cope with a changing environment. An expressed need is for those skills and attitudes that will enable teachers to be creative; to be self-motivated; to develop perspectives which view the environment more as a resource than a constraint; and to deal effectively with student problems that are sometimes manifested as aggression, violence and withdrawal. The need for such an orientation is even more critical in the face of decreasing levels of financial support from governments. This fall in the level of support demands that teachers draw on all available resources to facilitate teaching/learning activities.

Entry requirements for teacher training institutions are also of concern in some territories. Lack of adequate numbers of suitably qualified applicants has caused some teacher training colleges and Faculties of Education in the Universities in the Region to lower their standards of entry. Furthermore, a number of graduates of these institutions have been recruited to teach at higher levels in the education system than that for which they were trained. This situation has led to concerns about a mismatch between the knowledge base of the graduates and the cognitive demands of the subjects to be taught, especially at the upper level of the secondary school.

Maintaining a core of well-trained teachers is perhaps the most difficult problem facing the teaching service today. It is becoming increasingly difficult for governments to offer teachers competitive salaries. Faced with rising cost of living, inadequate levels of support from governments for the provision of teaching materials and a deteriorating environment, teachers are being lured from their profession into other occupations. Some migrate while others take up extra work to compensate for low wages, giving rise to the phenomenon of the absentee teacher. This situation not only leads to the loss of valuable trained teachers, but also leads to further difficulty in attracting suitable and well qualified persons to the profession.

Special attention will have to be paid to curricula of teacher education programmes so that they not only focus on upgrading the academic credentials of teachers but also include subjects and activities which increase their awareness of issues of national concern and provide them with the opportunity to gain the relevant knowledge and skills. Teacher training programmes must also ensure that on completion of their training teachers are able to transfer relevant knowledge and appropriate skills to the children they teach.

Background Paper No. 11

Delivery systems for teacher education need to be re-examined in the light of the demand for more trained teachers in the Region. Distance education programmes and school-based programmes with a clinical supervision focus are two of the main methodologies being developed and they will need to be strengthened through regional and national initiatives.

Insufficient use has been made of a regional approach to the development of methodologies and programmes for teacher education. This represents loss of an opportunity to draw on excellent areas in various programmes across the region which have proven successful. The presence of these pockets of resources signals an important role for the UWI and the UG in pulling together the main teacher education institutions into a carefully constructed network. Indeed this challenge could be a special focus for the ACTI.

In light of the contexts in which the teacher has to operate and the need for the teacher to meet current demands, new and creative ways of providing teacher education are required.

4.2 FUTURE DIRECTIONS

The creative strategies necessary in teacher education should address the following questions:

(i) How to establish and maintain a core of competent and highly motivated educators, marked by the appropriate mix of skills, abilities, attitudes and cultural sensitivities needed for the preparation of a citizenry that must cope with the challenges of the Twenty-First Century?

(ii) What are the appropriate recruitment and selection strategies that would promote the objective implied in (i) above?

(iii) How to develop environments and institutional cultures in schools and other educational establishments that will nurture the skills, abilities, attitudes and cultural sensitivities referred to in (i) above?

A place to start is with the institutional arrangements for teacher training. Changes are required to enable more persons to receive training and to make the training more relevant to the demands of the classroom. A shift from institution to school based training should therefore be considered.

Such an approach has several advantages:

(i) Schools will not have to find substitute teachers in order to release teachers for training.

(ii) Student teachers will be able to attend classes at the colleges during vacation time and avoid any disruption at the school.

(iii) Teacher training will be taking place in the same context in which the teacher has to operate.

(iv) More teachers can be trained since a training environment will be created within the school.

(v) The teacher trainers would be assisted by experienced teachers in the school who can serve as Master Teachers and by the Principal and Education Officers who can assist with the supervision of trainees.

(vi) Trainees will be challenged to evaluate their own performance and so will be developing skills that are necessary to monitor their professional development after the training period.

(vii) Trainees would be able to develop research skills since their interactions with supervisors and teacher trainers will be based on data collected by them using the classroom as a laboratory.

School based training will also present new challenges to the colleges and the teacher trainers. For example, the colleges will have to prepare teaching materials that can be used at a distance by the student teachers. Teacher trainers will need to orient the staff at schools in order to obtain the support necessary for the training programme. They will need skills in clinical supervision since one of their major functions will be to guide the teacher in setting out objectives and monitoring performance in achieving these objectives. Clinical supervision would also allow the trainer and student teacher to explore both cognitive and affective processes. In so doing, they will be able to identify the philosophy that will guide the teachers' professional development, the strengths that can be exploited and the attitudes that are required to cope with the demands of the classroom.

Personal development programmes should be an integral part of the training of teachers. Included in these programmes should be components promoting the adoption of healthy life

styles and encouraging teachers to be role models for their students and the communities with which they interface.

The training of trainers will also need to be given serious consideration. Such training could parallel in many respects the training of the student teachers. The universities should develop closer ties with training institutions, make their programmes more relevant and enable trainers to reflect on and systematise the work that they do.

Finally, for training to be effective, it has to be complemented by measures to improve the terms and conditions of service of teachers. These measures should include review and development of legislation for changes in the roles of the key persons in the education sector, closer relations between home, school and the community, greater support for the teacher and a review of salaries and conditions of service that will make the profession more attractive and enhance the status of teachers.

Teachers in the formal education system have the responsibility of helping children to acquire the technical as well as non-technical knowledge and skills they need to be able to survive in their societies.

While a significant amount of attention is given to preparing and equipping teachers for this task, a hard and critical look needs to be taken at the training programmes to which the Region's teachers are exposed.

Background Paper No. 11

4.3 POLICY GOALS

- **To establish and maintain a core of competent and highly motivated educators marked by the appropriate mix of skills, abilities, attitudes and cultural sensitivities.**
- **To expand teacher training programmes to enable more persons to be trained and to participate in the training exercise.**

4.4 ACTIONS REQUIRED

- **Review** teacher training programmes in light of current trends towards school-based training and establish mechanisms to support this approach.

- **Establish** a regional mechanism for developing a core curriculum for teacher education that would include:

  i) personal development courses;

  (ii) legal considerations with regard to the rights of teachers and students.

- **Use** flexible delivery systems for intensive training programmes designed to ensure that at least 95 per cent of all teachers at the pre-school, primary and secondary levels are trained by the year 2000.

- **Develop** and implement in-service courses for the training or re-training of teacher educators which prepare them to meet the needs of a changing teaching/learning environment and which incorporate courses in clinical supervision and methods of teaching adults.

- **Review** the terms and conditions of service of teachers in the Region with a view to making them more attractive and enhancing the status of the teaching profession.

SECTION 5

MANAGEMENT AND ADMINISTRATION OF SCHOOLS

5.1 ISSUES AND CONCERNS

The way in which regional education systems are organised, managed, supervised and financed has serious implications for matters of quality, nurturing individuality and the concept of making opportunity the privilege of all, in short, for human development. Available reports on education in the Caribbean Community point to weaknesses in student performance and to the fact that, generally speaking, schools are not well managed. These problems limit considerably the ability of the school system to provide quality education.

> Our best bet for improving schools lies not only in polishing or in fine-tuning reforms at the state level but in stimulating individual schools to change and providing them with adequate assistance to do so.
>
> **Background Paper No. 12**

The first unit to be managed and a key intervention point is the classroom. The next unit is the school. Effective teachers and managers with sound leadership skills are required at both levels. Furthermore, administrators need to be sensitised to the processes and relationships that are involved in the development of effective schools. The issues involved relate to curriculum development, management of the curricula, staff development, managing change, relationships between students, teachers, parents, the community and the Ministry of Education. In addition, attention needs to be given to the application of the democratic process as these relate to the management of schools.

> Our future governing structures must be based more and more on the understanding that decisions about schooling should not be made on the basis of power, but rather on the basis of who should decide. As teachers and school administrators receive appropriate training, they are more likely to feel the need for greater autonomy at the school level.
>
> **Background Paper No. 12**

Moreover, where effective schools exist in the Region, it is necessary to identify what it is they do well and to share this information so as to facilitate the development of structures and support mechanisms that induce change. Effective schools are those that produce desirable effects on a sustained basis. The practices employed in these schools can inform course content for training programmes and proposed strategies for the effective management of schools.

Another issue is decentralisation. The case for decentralisation rests partly upon grounds of efficiency and partly upon better public relations and public

involvement which will result. Steps towards decentralisation are evident in the establishment of school boards in Member States. Generally, however, school boards are characterised by loose arrangements and are not responsible for the establishment, operations or control of the schools. Their main task is one of providing support, taking a personal interest in the school and assisting with certain aspects of management such as the appointment of teachers. This approach does not allow the school to benefit from the range of resources available within the Community. Given the need for partnership arrangements to share responsibilities for education and training, every effort should be made to expand and encourage local involvement and broad participation in education policies at the local/district level.

> The establishment of school boards would provide a broad base for participation, responsibility and support in matters of education. Consideration should therefore be given to their establishment on a district basis, where these do not yet exist. By its very nature the school board should be the local mechanism to deal with public participation in, awareness of, attitudes towards, and support for, education at the local level.
>
> **Background Paper No. 12**

Desirable management practices should be matched with effective supervision modalities. Key persons in the supervision of schools are the Chief Education Officers and the School Supervisors or Education Officers. Some of the problems encountered in supervision point to the need for these persons to be trained and sensitised to the salient and crucial aspects of their leadership roles. Strategies to involve resource persons in the community to facilitate supervision exercises should be explored, given the common concerns expressed by principals and teachers about the inability of Ministry of Education personnel to visit schools as frequently as required.

5. 2 FUTURE DIRECTIONS

Education for the future requires a shift from a short-term planning perspective with which we feel so comfortable to medium and long-term planning. Another requirement is a well qualified, committed and motivated teaching profession in Member States to ensure quality education. The corollary to this axiom is that the training of educational administrators for the future is crucial and has to be markedly different. Many of the tools needed for such training are already available, but not yet assimilated in training activities.

Training of administrators and managers is a key to the reform required to face the challenges of the future. Such training should be grounded in a set of beliefs and values that reflect a philosophy of administration. This philosophy must also be extended to include ways of working with people, providing opportunities for others to experience growth, success and a heightened sense of professional efficiency.

Further, attention must be paid to the creation in the school systems of special positions with responsibility for managing

change. A regional approach will provide the support and information necessary for those change agents working in these positions in Ministries and schools to manage effectively the changes that are taking place so rapidly.

> Commitment to the democratic ideal in education should mean involving every school system in finding ways of implementing concepts of decentralisation in ways that broaden participation, secure support of the community, facilitate communication and ensure efficiency and greater autonomy in the management of schools.
>
> **Background Paper No. 12**

Another important consideration for the future is the need for commitment by governments to view research as a key component of reform processes. Research is required for a better understanding of the strengths of present arrangements, the difficulties confronted, the considerations underlying present output and effectiveness, objectives appropriate to education, the options open to the Caribbean Community for achieving those objectives, constraints to achievement and the identification of pockets of excellence in schools.

The changes required for effective management and supervision should also be based on the principle of partnership and participation. Every effort should be made to expand and encourage local involvement in education policies. This can be achieved through the establishment of school boards.

A regional approach is required for sharing information and identifying a range of options that are appropriate for different types of situations.

Finally, the management function must also be shared at the different levels of the education system. The principal role of the Chief Education Officer, Education Officers, School Supervisors, Principals and other administrators is one of leadership. The training of such persons should include new orientation to community leadership, action oriented research, information systems, curriculum strategies and organisational plans.

> Some Education Acts do not delineate in clear terms the power, duties and responsibilities of all the functionaries charged with the administration of education. Adequate delineation of the powers of the Chief Education Officer is critical. This functionary is the chief professional activist in the Ministry of Education. Clarification of his duties would minimise potential conflict with the Permanent Secretary who is charged with the general administration of the Ministry of Education.
>
> **Background Paper No. 14**

At all levels administrators must have a vision of what must happen in schools, must be able to work with others to develop the programmes to ensure that what must happen will happen and to create a climate that will give innovations a chance to succeed.

5.3 POLICY GOALS

- **To develop a philosophy of administration that will reflect a set of beliefs and practices for administrators and managers, necessary to effect change at various levels of the education system.**
- **To establish mechanisms that facilitate administrative and supervisory practices and the management of change.**
- **To support the development and implementation of research that will inform strategies and practices for more effective management and supervision.**
- **To encourage and expand local involvement and broad participation in educational policies at the district level.**
- **To develop a core of trained persons for effective administration of school systems.**

5.4 ACTIONS REQUIRED

- **Evaluate** the existing arrangements in the Region for the management of schools by boards and develop a regional approach for the decentralisation of management functions and establishment of school boards.
- **Develop** and implement strategies for involving resource persons in the community in supervisory practices.
- **Develop** necessary legislation that will guide the reforms required in administrative and supervisory practices.
- **Implement** innovative training programmes in management and leadership for School Administrators and Chief Education Officers.
- **Establish** a unit at the Ministry of Education for continuous examination, development, evaluation and redirection of administrative practices necessary for managing curriculum reform and changes taking place in the education sector.
- **Conduct** research and document case studies on Caribbean situations which will inform actions, strategies and programmes for more effective management and supervision of schools.

SECTION 6

FINANCING OF EDUCATION

6.1 ISSUES AND CONCERNS

The main issues in the area of financing of education relate to the impact of structural adjustment programmes on investment in education, the allocation of financial resources across education levels and inefficiencies in the use of resources within educational institutions.

Education systems in the Region are facing increasing financial constraints especially under structural adjustment programmes which have imposed limits on government expenditure. The consequences for education are far-reaching resulting in cuts in education budgets at a time when there is a demand for increased investment.

> In a financial crisis, the education sector is most vulnerable to cuts. When cuts have to be made within the education sector, the reductions tend to be made in the area where political reaction is most manageable such as in the non-salary categories of the recurrent budget. Thus little, if anything, is spent on educational materials and equipment maintenance.
>
> **Background Paper No. 13**

While CARICOM Member States contribute a fair amount of their national budgets to education, most of the allocation goes towards recurrent expenditure and especially for teachers' salaries with the result that a smaller portion is left for items such as teaching aids and materials. At the tertiary level administrative and non-academic costs consume most of the budget. As a consequence, in some university faculties few resources, if anything at all, are available for research work. These budget cuts have contributed to a deterioration, in the quality of education at all levels of the system. The deterioration is most marked at the primary level. However, inefficient use of resources also occurs at all levels.

> Given nearly 100 per cent external financing of capital expenditure, local outlays on upkeep and replacement of the capital stock in the educational sector are inadequate. Bearing in mind frequent donor insistence on some measure of local financing, this very low level of domestic expenditure in the educational sector could well be a constraint on mobilising additional resources for the sector.
>
> **Senior Policy Seminar on Educational Responses to Structural Adjustment, 1992**

In general, increased financial constraints have undermined staff development and the maintenance and improvement of physical plant and other educational infrastructure.

6.2 FUTURE DIRECTIONS

The amalgamation of small schools, especially in rural areas, multi-grade teaching in place of grade repetition, increased staff-student ratios especially at universities, and increased contact hours for lecturers where circumstances indicate, are all strategies with the potential for producing greater efficiency in the use of resources.

At the tertiary level, institutions have traditionally relied on donor agency funds to introduce new programmes, sponsor professorial chairs, and for staff training/development and technical assistance. Some of these agencies, however, are now experiencing financial constraints and therefore, cannot be relied upon to support the education systems in the CARICOM to the extent that they have done in the past. There is need therefore for these tertiary institutions to embark on new strategies for educational financing.

> One way of improving both the efficiency and equity of CARICOM education systems is to impose selective user charges particularly at the university level and to redistribute the revenue to the lower levels of the education system especially at the primary level. Government spending should be redirected to those students who have the greatest need.
>
> **Background Paper No. 13**

The universities in the Region, will need to consider the implementation of cost recovery measures. These include the introduction or raising of tuition fees, the use of student loans, scholarships and bursaries sponsored by governments, the private sector and other private sources.

Tuition fees at the universities could also assist in recovering at least a part of the cost of education. While this may run counter to the "free education" policies espoused by some Member States, this has to be weighed against the high cost of training university students.

Two consequences of charging or raising tuition fees are:

(i) the cost of higher education will increase thereby putting it out of the reach of many people

(ii) enrolment may decrease at a time when the regional universities need to increase enrolment in areas critical to national and regional development.

The impact of these consequences can be minimised if financial support is provided for students to ensure that fees do not put at a disadvantage talented students from low income families. For example, financial support can be provided in the form of student loans. While student loan policies may be costly and difficult to administer particularly at the repayment stage, they do have the effect of improving the motivation of students who become more cost-conscious and more decisive about future career prospects. Selective scholarships and bursaries could also help to reduce the loan burden on poor students. In addition, students could seek funding from their employers and then enter into a long-term agreement for repayment through small monthly salary deductions, after a grace period to settle into the job.

Private investment should be encouraged since it enables more local resources to be mobilised for education. However, government controls are required to ensure that private schools operate under acceptable policies and with approved programmes to ensure a desirable standard of service.

Increasingly, education systems will have to rely on the community for financial support. Sources in the community on which schools can draw include Parent/Teachers' Associations, Old Students' Associations, and Friends of the School. Schools furthermore have a wealth of talent that can be used productively. Some income can be generated from the sale of products made in the technical-vocational areas, from concerts displaying the talents of students and from exhibitions of their artistic products.

Tertiary institutions can draw on similar resources. Universities, moreover, can capitalise on the consultancy services that their staff members can provide. They can establish business arms and enter into such enterprises as low cost housing development and low cost fuel production. The initiatives that could be taken are many, providing legislation and the statutes governing these institutions permit them.

Despite the measures taken to meet costs, education systems cannot be expected to become fully self-financing. The important contribution of this sector to the growth and development of countries merits a commitment on the part of Government to provide adequate levels of funding.

Officials in Ministries of Education need to become more skilled in their negotiations with internal and external funding bodies.

> For their part, educators had failed to make as strong a case as they should for educational expenditure or to argue for educational investment as an economic generator as well as a social service. Ministries of Education needed to do themselves justice in their negotiations with internal and external funding bodies and had not always done so. Educators needed training in analysing the effects of educational programmes on the social and economic objectives of macro-economic plans.
>
> **Senior Policy Seminar on Educational Responses to Structural Adjustment, 1992**

There also needs to be more dialogue between Ministries of Education and Finance at the national level for a better understanding of the issues and concerns. At the institutional level education managers need to become more skilled in budgeting, negotiating, project formulation, economic analysis and in being able to examine the social, educational and economic aspects of policy proposals. The project on ***"Strategies for the Enhancement of Human Resources Development"*** in CARICOM countries under Structural Adjustment initiated by the Commonwealth Secretariat, should lead to an improvement in the effectiveness and efficiency with which we handle educational financing in the Region in the future.

6.3 **POLICY GOALS**

- **To broaden the sources for financing education to ensure that the quality in education is maintained.**
- **To protect the education sector from the negative impact of structural adjustment.**
- **To increase the level of efficiency of the use of resources at all levels of the education system.**

6.4 **ACTIONS REQUIRED**

- **Modify** existing teacher-student ratios at all levels of the education system with a view to making them more productive.
- **Use** appropriate innovative instructional strategies to replace those which are non-productive in terms of use of resources.
- **Harness** the resources of the Community to aid in the financing of educational systems.
- **Introduce** cost-recovery measures at the tertiary level.
- **Initiate** regional case studies of country experiences in:
  - amalgamation of schools
  - student loan schemes
  - private schooling

  and disseminate the results of these experiences to all Member States.
- **Strengthen** governments' capability in negotiations with international funding agencies.
- **Promote** dialogue between Ministries of Education and Finance at the national and regional levels in order to obtain consensus on the importance of education in the development process and to secure adequate budgetary allocations.
- **Promote** and utilise networking as a means of strengthening human resource capability.
- **Enhance** the skills of educational managers in budgeting and financial management, negotiating, project formulation and economic analysis.

Also recognised that the implementation of the recommendations of the Task Force would require action at regional, sub-regional and national levels.

APPENDIX I

MEMBERS OF THE ADVISORY TASK FORCE ON EDUCATION

Dr. Desmond Broomes
Senior Research Fellow
Faculty of Education
University of the West Indies
BARBADOS

Professor Aggrey Brown
Director
Caribbean Institute of Mass Communication (CARIMAC)
JAMAICA

Dr. Lawrence Carrington
Deputy Dean
Faculty of Education
University of the West Indies
TRINIDAD AND TOBAGO

Mr. Hubert Charles
Coordinator
Caribbean Network for Educational Innovation in Development (CARNEID)
BARBADOS

Dr. Patricia Ellis
Consultant in Adult Education
16 Sandiford
St. Phillips
BARBADOS

Mr. Carol Keller
Dean
Faculty of Education
University of the West Indies
TRINIDAD AND TOBAGO

Dr. Alfred Sangster
President
College of Arts, Science and Technology (CAST)
JAMAICA

Mr. Leton Thomas
Principal
Sir Arthur Lewis Community College
SAINT LUCIA

Mrs. Irene Walter
Pro-Registrar
Caribbean Examinations Council
JAMAICA

APPENDIX II

BACKGROUND PAPERS PREPARED BY THE TASK FORCE IN COLLABORATION WITH THE EDUCATION SECTION OF THE CARICOM SECRETARIAT

1. Background to the Work of the Advisory Task Force on Education: Synopsis of Consultation.
2. Issues in Early Childhood, Primary and Secondary Education
3. Tertiary and University Reform and Development
4. Culture and Education in the Arts
5. Education for Special Needs
6. Language Learning and the Teaching of Modern Languages*
7. Overview of Language and Communication in the Caribbean
8. Mathematics in Caribbean Schools: The 90s and Beyond
9. Communication Technologies and the Curriculum
10. Preparing Caribbean Youth for the World of Work
11. Adult Education
12. Management and Supervision of School Systems
13. Financing of Education
14. Legal Framework of Education in the Commonwealth Caribbean**

* Contribution from Professor Dennis Craig, Vice Chancellor, University of Guyana

** Contribution from Dr. Kenny Anthony, Faculty of Law, UWI, Cave Hill, Barbados

APPENDIX III

CONSULTATIONS AND MEETINGS

1. First Regional Consultation on Education (1989) Kingston, Jamaica.
2. First Meeting on the ATFE (1990) Bridgetown, Barbados.
3. Second Meeting on the ATFE (1990) St. Augstine, Trinidad & Tobago.
4. Third Meeting of the ATFE (1991) Roseau, Dominica.
5. Meeting of a Sub-Committee of the ATFE (1991) Port-of-Spain, Trinidad & Tobago.
6. Meeting of a Sub-Committee of the ATFE (1991) Georgetown, Guyana.
7. Consultation on Primary Education (1991) Belize City, Belize.
8. Meeting of a Sub-Committee of the ATFE (1992) Georgetown, Guyana.
9. Seminar on the Management of Schools by Boards (1992) Georgetown, Guyana.
10. Consultations on Education (1993) Castries, Saint Lucia.
11. Consultations on Education (1993) Nassau, Bahamas.
12. Consultations on Education (1993) Bridgetown, Barbados.
13. Fourth Meeting of the ATFE (1993) Port-of-Spain, Trinidad & Tobago.

REPORTS

15. CARICOM Survey on Technical and Vocational Education and Training - May 1988

16. Regional Strategy for Technical and Vocational Education and Training - May 1990

17. The Future of Education in the Caribbean: Report of the First Regional Consultation - November 1989

18. Foundation for the Future: OECS Education Reform Strategy - July 1991

19. Consultation on Basic Education, Belize City, Belize, November 1991

20. Consultation on Education, Nassau, The Bahamas, March 1993

21. Consultation on Education, Castries, Saint Lucia, January 1993

22. Consultation on Education, Bridgetown, Barbados, May 1993

23. Progress Report on Work of the Advisory Task Force on Education. Presented to the West Indian Commission 1992

24. Report: Senior Policy Seminar on Education Responses to Structural Adjustment, 1992

25. Management of Schools by Boards, Guyana, March 1992